

# CURRICULUM VITAE

LAWRENCE J. SINGERMAN, MD, FACS

**OFFICE ADDRESSES** Retina Associates of Cleveland, Inc.  
3401 Enterprise Parkway, Suite 300; Beachwood, Ohio 44122 (Main Office)  
690 White Pond Drive, Suite 120; Akron, Ohio 44320  
4690 Munson Street NW; Canton, Ohio 44718  
340 Oxford Street, Suite 210; Dover, Ohio 44622  
6100 South Broadway Avenue, Suite 200; Lorain, Ohio 44052  
9485 Mentor Avenue, Suite 211; Mentor, Ohio 44060  
15299 Bagley Road, Suite 200; Middleburg Heights, Ohio 44130  
17534 Royalton Road, Suite 201; Strongsville, Ohio 44136  
170 North Road NE; Warren, Ohio 44483  
4350 Crocker Road, Suite 200; Westlake, Ohio 44145  
5390 Belmont Avenue; Youngstown, Ohio 44505

**TELEPHONE** 216-831-5700

**WEBSITE** [www.retina-doctors.com](http://www.retina-doctors.com)

## EDUCATION

*College* Case Western Reserve University  
Cleveland, Ohio  
September 1961–June 1965, BA

*Medical School* Wayne State University  
Detroit, Michigan  
September 1965–May 1969, MD

## POSTGRADUATE TRAINING

*Internship* Medical/Surgical  
Mt. Sinai Medical Center  
Cleveland, Ohio  
July 1969–June 1970

*Residency* Ophthalmology  
Mt. Sinai Medical Center  
Assistant Resident  
July 1970–June 1972  
Chief Resident  
July 1972–June 1973  
Ulmer Award for Outstanding Research in Ophthalmology

*Fellowship*                      Retinal Fellowship  
   Retinal Vascular Center  
   The Wilmer Ophthalmological Institute of Johns Hopkins University  
   Baltimore, Maryland  
   July 1973–June 1974

## LICENSURE AND BOARD CERTIFICATION

Licensed to practice medicine in Ohio, Florida, and Pennsylvania

Diplomate, American Board of Ophthalmology, 1975

## PROFESSIONAL POSITIONS

Retina Associates of Cleveland (Founder), 1974–

Practice limited to retinal diseases and surgery. Associates: Michael A. Novak, MD; Hernando Zegarra, MD; Z. Nicholas Zakov, MD; Scott D. Pendergast, MD; David G. Miller, MD; Joseph M. Coney, MD; Jerome P. Schartman, MD; Llewelyn J. Rao, MD; Arnold F. Nothnagel, DO; Shawn A. Lewis, MD; Sean M. Platt, MD

Founder and Executive Secretary, The Macula Society, 1977–

Medical Director, The Retinal Vascular Foundation, 1981–

Consulting Director, Retinal Diseases Image Analysis Reading Center (REDIARC), Case Western Reserve University Department of Ophthalmology, 2015–

Vice Chair for Clinical Activities, Dean's Committee of, Case Western Reserve University School of Medicine, 2014–

Director, Retinal Institute, Mt. Sinai Medical Center, Cleveland, Ohio, 1990–1997

Director, Retinal and Laser Surgery, Mt. Sinai Medical Center, Cleveland, Ohio, 1985–1999

Director, Retinal Fellowship Program, Mt. Sinai Medical Center, Cleveland, Ohio, 1985–1995

Vice-Chairman of the Council, American Academy of Ophthalmology, 1994–1996

Chairman, Haas Fund Committee (for research), Mt. Sinai Medical Center, Cleveland, Ohio; 1992–1999

Case Western Reserve University, Continuing Medical Education Activity Director for Cleveland Ophthalmological Society meetings, 1987–1996

Case Western Reserve University, Continuing Medical Education Activity Director for The Macula Society annual meetings, 1978–1996

Director, Regional Eye Trauma Center (Northeastern Ohio) of the National Eye Trauma System and the National Eye Trauma Registry

Chairman, Great Lakes Region, American Academy of Ophthalmology Education Trust Fund, 1992–1997

State Coordinator of the American Academy of Ophthalmology Diabetes 2000 Program for Ohio, 1991–2001

Chairman, Strategic Planning Committee, 1989–1994; First Honorary Board Member for Life; Diabetes Association of Greater Cleveland

Past-President, Diabetes Association of Greater Cleveland (1987–1989)

Past-President, Cleveland Ophthalmological Society

Past-President, Ohio Ophthalmological Society

Chairman, Committee for the Arnall Patz Chair in Ophthalmology of the Wilmer Institute of Johns Hopkins University School of Medicine

Jury Member, Pisart Vision Award (Lighthouse International's award for noteworthy contributions to the prevention, cure, or amelioration of severe vision impairment or blindness, 2005)

Scientific Advisory Council, The Macula Foundation, Inc., New York, New York

Advisory Board, American Society of Contemporary Ophthalmology

Medical Advisory Board, Macular Degeneration Partnership

Medical Advisory Board, National Association for the Visually Handicapped

Scientific Advisory Board, ArcticDx

Scientific Advisory Board, Ohr Pharmaceuticals

Scientific Advisory Board, Ophthotech Pharmaceuticals

Scientific Advisory Board, Digisight

Ophthalmology Advisory Board, Eli Lilly and Company, 2003–2004

Scientific Advisory Board, EyeTech Pharmaceuticals, 2001–2004

Scientific Advisory Board, Acuity Pharmaceuticals, 2007–2011

Medical Advisor, *Journal of Ophthalmic Photography*, 2015–

Editorial Board, *Annals of Ophthalmology*

Editorial Board, *Journal of Diabetes and Its Complications*

Editorial Board, *Ophthalmic Surgery and Lasers*

Editorial Board, *Ophthalmology Times*

Editorial Board, *Retina, The Journal of Retinal and Vitreous Diseases*

Editorial Board, *Retina Cases and Brief Reports*

Editorial Advisory and Review Board, *Retinal Physician*

Editorial Board, *Retina Vitreus (Turkish)*

Scientific Referee, *American Journal of Ophthalmology*

Scientific Referee, *Archives of Ophthalmology*

Scientific Referee, *British Journal of Ophthalmology*

Scientific Referee, *New England Journal of Medicine*

Scientific Referee, *Ophthalmology*

## ACADEMIC APPOINTMENTS

Clinical Professor of Ophthalmology, Case Western Reserve University/University Hospitals of Cleveland, Cleveland, Ohio, July 1991–present

Associate Clinical Professor of Ophthalmology, July 1984–June 1991

Assistant Clinical Professor of Ophthalmology, July 1978–June 1984

Senior Clinical Instructor of Ophthalmology, July 1977–June 1978

Clinical Instructor of Ophthalmology, July 1975–June 1977

Member, Promotions Committee, Department of Ophthalmology, 1994–

Voluntary Professor of Clinical Ophthalmology, Bascom Palmer Eye Institute, Miami, Florida, 2003–

## TEACHING CONTRIBUTIONS

Teaching activities at ophthalmology grand rounds and basic science courses at Case Western Reserve University Department of Ophthalmology for many years.

Varying teaching responsibilities for ophthalmology residents at local hospitals and with medical students, residents, retina fellows and others, since 1974.

Teaching of retinal fellows, visiting attendings, residents, and medical students in elective with Case Western Reserve University School of Medicine.

Recipient of First Annual Outstanding Teacher Award (with associates Drs. Thomas A. Rice and Michael A. Novak), Case Western Reserve University Hospitals, Ophthalmology Residents Program, 1985. Also recipient of outstanding teaching awards at Mt. Sinai Medical Center and St. Luke's Hospital ophthalmology residency programs.

## HONORS AND AWARDS

Dowling Society Inductee, Association for Research in Vision and Ophthalmology recognition for significant support for eye and vision research, 2018

The Retina Society's J. Donald M. Gass Award, at the 50<sup>th</sup> annual meeting, 2017

First Recipient, the Macula Society Lawrence J. Singerman Medal, 2017

- To be awarded annually for Outstanding Contributions to the Advancement of Science through Retinal Clinical Trials

Charter Member, Retina Hall of Fame, 2017

*Best Doctors in America*, 1992–2018

American Society of Retina Specialists Senior Honor Award, 2016

Maimonides Award, Israel Bonds' highest honor for medical professionals, in appreciation of outstanding leadership and devoted participation in medical service and support for the development of Israel's economy, July 2012

The Arnall Patz Medal for Outstanding Contributions in the Study of Retinal Vascular Diseases, September 2009

Diabetes Research Lifetime Achievement Award, Dietrich Diabetes Research Institute of the Diabetes Association of Greater Cleveland, October 2007

Life Achievement Honor Award, American Academy of Ophthalmology, 2006

Shaker Heights Alumni Association Hall of Fame Inductee, October 2003

National Registry's *Who's Who in Executives and Professionals*, 2002

The J. Donald M. Gass Medal for Outstanding Contributions in the Study of Macular Diseases, 1999

Named 1 of the 111 best ophthalmologists and 1 of the 10 best medical retinal specialists in America by *Ophthalmology Times*, October 1996

Senior Honor Award, American Academy of Ophthalmology, 1994

U.S. Registry's *Who's Who Among Outstanding Americans*, 1994–95

Honored Member, *Who's Who Among American Executives*, 1994–95

Albrecht von Graefe Award for distinguished contributions in Ophthalmology, presented by the American Society of Contemporary Ophthalmology, June 28, 1993

Honor Award, American Academy of Ophthalmology, 1984

Research Fellowship Award, sponsored by the Retinal Vascular Service of the Wilmer Ophthalmological Institute, Johns Hopkins Hospital, July 1973–July 1974

## MEMBERSHIPS

American Academy of Ophthalmology – Board of Councilors

Vice Chair, Council, 1994–1996

Councilor, 1990–1994

Alternate Councilor, 1987–1990

Councilor, 1981 (Founding of Board of Councilors)–1987

American Academy of Ophthalmology – Board of Directors

Member, Executive Committee, 1995–1996

American Association for Ophthalmic Standardized Echography

American Board of Ophthalmology – Diplomate

American College of Surgeons – Fellow

Ohio Committee on Applicants District #1, 1998–2008

Committee on Medical Motion Pictures, the Board of Regents, 1994–97

American Diabetes Association

American Medical Association

American Society of Contemporary Ophthalmology – Advisory Board

American Society of Retinal Specialists (formerly the Vitreous Society) – Charter Member

American Society for Laser Medicine and Surgery – Fellow

Anterior Segment Laser Society

Association for Research in Vision and Ophthalmology

Cleveland Academy of Medicine

Cleveland Medical Library Association – Life Member

Cleveland Ophthalmological Society – Past-President

Cleveland Surgical Society

Club Jules Gonin

Diabetes Partnership of Cleveland / Diabetes Association of Greater Cleveland (*closed 2017*)  
Past President; member of Executive Committee for 10 years; member of Board of Trustees for 15 years. During presidency, established formal strategic plan. Chaired Strategic Plan Committee and continues to chair Strategic Planning Committee Review. Presided over move to new location. First Honorary Board Member for Life.

European Society of Retina Specialists

International Association of Ocular Surgeons

International College of Surgeons – Fellow

International Diabetes Federation

International Society of Ophthalmic Ultrasound

Johns Hopkins Medical and Surgical Association

Juvenile Diabetes Foundation – Medical Advisory Board

Juvenile Diabetes Foundation International – Medical Advisory Board, July 1996–July 1998

The Macula Society – Founder, 1977; continuously re-elected to 5-year terms as Executive Secretary since 1978

Michaelson Club – Council Member

New York Academy of Sciences

Ohio Ophthalmological Society

President, 1989–1991

President-Elect, 1987–1989

Secretary/Treasurer, 1986

Program Committee Chairman, 1986–1989, 1992–1993

Ohio State Medical Association

Ophthalmic Council of Higher Learning

Ophthalmic Photographers Society

Pan American Ophthalmology Association  
Pennsylvania Academy of Ophthalmology and Otolaryngology  
Pennsylvania Diabetes Academy, Member, Scientific Advisory Board  
Research to Prevent Blindness – Ophthalmology Associate  
Retinitis Pigmentosa Foundation – Medical Director, Cleveland; Life Member  
Retina Society  
Royal Society of Medicine  
Schepens International Society  
Society for Clinical Trials  
Society for Geriatric Ophthalmology  
Wilmer Residents Association, Johns Hopkins Hospital  
Uveitis Society of America – Charter Member  
Member, EarthMed.com Health Advisory Board, 1999.  
Member, International Nominating Committee, 5<sup>th</sup> Michaelson Medal and Award, 1996.  
Member, Scientific Committee, International Symposium on Fluorescein Angiography, University of St. Gall, St. Gall, Switzerland. September 8–12, 1996.  
Member, Scientific Committee, Second International Symposium on Retinal Pigment Epithelium. Genoa, Italy. May 29–30, 1996.  
Member, Organizing Committee, First Jerusalem International Congress on Retinal and Vitreous Diseases. Jerusalem, Israel. 1996.  
Member, International Committee, Fourth International Symposium on Ocular Circulation and Neovascularization. Budapest, Hungary. May 22–27, 1995.  
Member, Scientific Committee, Third International Symposium on Ocular Circulation and Neovascularization. Paris, France. May 21–24, 1992.

#### **HOSPITAL & ASC AFFILIATIONS**

Hillcrest Hospital; Cleveland, Ohio  
Lippy Surgery Center; Warren, Ohio  
Southwest General Hospital; Cleveland, Ohio



University Hospitals of Cleveland; Cleveland, Ohio

## RESEARCH ACTIVITIES

### *NIH-funded Grants*

*DRCRnet Protocol U. Short-term evaluation of combination corticosteroid+anti-VEGF treatment for persistent central-involved diabetic macular edema following anti-VEGF therapy in pseudophakic eyes*

Principal Investigator, 2014–2017

*Study of COmparative Treatments for REtinal Vein Occlusion 2 (SCORE2)*

Principal Investigator, 2014–

*DRCRnet: Genes in Diabetic Retinopathy Project*

Principal Investigator, 2012–

*DRCRnet Protocol R. Phase II evaluation of topical NSAIDS on eyes with non-central involved DME*

Principal Investigator, 2011–2013

*Comparison of age-related macular degeneration treatments trials: Lucentis-Avastin trial (CATT)*

Principal Investigator, 2008–2012

*DRCRnet Protocol H. A Phase 2 evaluation of anti-VEGF therapy for diabetic macular edema: bevacizumab (Avastin)*

Principal Investigator, 2006–2008

*DRCRnet Protocol E. A pilot study of peribulbar triamcinolone acetonide for diabetic macular edema*

Principal Investigator, 2005–2007

*Standard Care vs. COrticosteroid for REtinal Vein Occlusion (SCORE) Study*

Principal Investigator, 2004–2009

*DRCRnet Protocol B. A randomized trial comparing intravitreal triamcinolone acetonide and laser photocoagulation for diabetic macular edema*

Principal Investigator, 2004–2007

*Diabetic Retinopathy Clinical Research Network (DRCRnet) Protocol #1A. A pilot study of laser photocoagulation for diabetic macular edema*

Principal Investigator, 2003–2007

*Complications of Age-related Macular Degeneration Prevention Trial (CAPT)*

Principal Investigator, 1998–2006

*Submacular Surgery Trials*

Principal Investigator, 1997–2004; Co-investigator, 1995–1997

*Choroidal Neovascularization Prevention Trial – Pilot Study*

Principal Investigator, 1995–2001

*Central Vein Occlusion Study (CVOS)*

Principal Investigator, 1988–1993

*Krypton-Argon Regression of Neovascularization Study (KARNS)*

National Study Co-Chairman (Fellow Co-Chairman: Frederick L Ferris III, at the National Institutes of Health)

Principal Investigator, Cleveland Center, 1984–1993

*Macular Photocoagulation Studies (MPS)*

Principal Investigator, 1979–1988

Executive Committee, June 1982–June 1983; December 1987–November 1988;

December 1990–November 1991

*Krypton Macular Photocoagulation Study (KMPS)*

Principal Investigator, Cleveland Center, 1982–1991

Executive Committee, June 1982–June 1983

*Foveal Photocoagulation Study (FPS)*

Principal Investigator, Cleveland Center, 1986–1994

Executive Committee, 1990–1991

*DRCRnet Protocol AB. Intravitreal anti-VEGF vs. prompt vitrectomy for vitreous hemorrhage from proliferative diabetic retinopathy*

Co-investigator, 2017–

*DRCRnet Protocol W. Intravitreal anti-vascular endothelial growth factor treatment for prevention of vision threatening diabetic retinopathy in eyes at high risk*

Co-investigator, 2017–

*DRCRnet Protocol V. Treatment for central involved diabetic macular edema in eyes with very good visual acuity*

Co-investigator, 2014–2018

*DRCRnet Protocol T. A comparative effectiveness study of intravitreal aflibercept, bevacizumab, and ranibizumab*

Co-investigator, 2012–2018

*DRCRnet Protocol S. Prompt panretinal photocoagulation versus intravitreal ranibizumab with deferred panretinal photocoagulation for proliferative diabetic retinopathy.*

Co-investigator, 2012–2017

*DRCRnet Protocol M. Effect of diabetes education during retinal ophthalmology visits on diabetes control*

Co-investigator, 2011–2015

*Home vision monitoring in AREDS2 for progression to neovascular age-related macular degeneration*

Co-investigator, 2011–2013

*DRCRnet Protocol N. Evaluation of intravitreal ranibizumab for vitreous hemorrhage due to proliferative diabetic retinopathy*

Co-investigator, 2010–2012

*DRCRnet Protocol O. Comparison of time-domain OCT and spectral domain OCT retinal thickness measurement in diabetic macular edema*

Co-investigator, 2009–2010

*DRCRnet Protocol I. Intravitreal ranibizumab or triamcinolone acetonide in combination with laser photocoagulation for diabetic macular edema*

Co-investigator, 2007–2014

*DRCRnet Protocol K. Course of response to focal photocoagulation for diabetic macular edema*

Co-investigator, 2007–2008

*Age-Related Eye Disease Study 2 (AREDS2)*

Co-investigator, 2006–2012

*Epidemiology of Diabetes Interventions and Complications Trial (EDIC)*

Study Ophthalmologist for the Case Western Reserve University-Mt Sinai Medical Center, 1994–

Member, Research Review Committee, 1994–

*Tamoxifen-related Retinopathy Study*

Principal Ophthalmologist, 1993–1994

*Central Vein Occlusion Study (CVOS) Electrophysiology Ancillary Study*

Co-investigator, 1990–1992

*Endophthalmitis Vitrectomy Study (EVS)*

Co-investigator and Enucleating Surgeon, 1989–1993

*Collaborative Ocular Melanoma Study (COMS)*

Following and Enucleating Ophthalmologist, 1987–2003

*Diabetes Control and Complications Trial (DCCT)*

Study Ophthalmologist for the Case Western Reserve University-Mt Sinai Medical Center and member of the National Ophthalmic Committee, 1984–1994

*National Cooperative Diabetic Retinopathy Study (DRS)*. Participation included complete evaluation and laser or xenon treatment of patients. July 1973–July 1974.

### ***Other National Clinical Trials***

*Randomized, double masked, uncontrolled , multicenter phase I/II study to evaluate safety and tolerability of PAN-90806 eye drops, suspension in treatment-naïve participants with neovascular age-related macular degeneration (AMD)*

Principal Investigator, 2018–

*Phase III, multicenter, randomized, double-masked, active comparator-controlled study to evaluate the efficacy and safety of RO6867461 in patients with diabetic macular edema (YOSEMITE)*

Principal Investigator, 2018–

*Two-year, three-arm, randomized, double-masked, multicenter, phase iii study assessing the efficacy and safety of brolicizumab versus aflibercept in adult patients with visual impairment due to diabetic macular edema (KESTREL)*

Principal Investigator, 2018–

*Phase 2b randomized, double-masked, controlled trial to assess the safety and efficacy of intravitreal administration of Zimura™ (anti-c5 aptamer) in subjects with geographic atrophy secondary to dry age-related macular degeneration*

Principal Investigator, 2018–

*Phase 2 double-masked, placebo-controlled study to assess the safety and efficacy of subcutaneously administered AKB-9778 15 mg once daily or 15 mg twice daily for 12 months in patients with moderate to severe nonproliferative diabetic retinopathy (TIME-2b study)*

Principal Investigator, 2017–

*Phase III multicenter randomized, sham controlled, study to determine the safety and efficacy of Renexus® in macular telangiectasia type 2 (NTMT-03-A)*

Principal Investigator, 2017–

*Extension study of NT-501 ciliary neurotrophic factor (CNTF) implant for macular telangiectasia (NTMT-01/02E)*

Principal Investigator, 2017–

*The correlation of Paxos checkup mobile app to standard in office visual assessment*

Principal Investigator, 2017

*Efficacy and safety study of squalamine ophthalmic solution in subjects with neovascular AMD (MAKO)*

Principal Investigator, 2016–

*Phase II, multicenter, randomized, single-masked, sham-controlled study of safety, tolerability and evidence of activity of intravitreal APL-2 therapy in patients with geographic atrophy (GA)*

Principal Investigator, 2015–2018

*Phase III double-masked study of safety and efficacy of abicipar pegol in patients with neovascular age-related macular degeneration*

Principal Investigator, 2015–

*Randomized, double-masked, multicenter, three-arm study comparing the efficacy and safety of RTH258 versus aflibercept in subjects with neovascular age-related macular degeneration*

Principal Investigator, 2015–2018

*Randomized, double-masked, placebo-controlled, dose-finding, non-inferiority study of X-82 plus prn intravitreal (IVT) anti-VEGF compared to prn IVT anti-VEGF monotherapy in neovascular AMD*

Principal Investigator, 2015–2018

*A study of lampalizumab intravitreal injections administered every two weeks or every four weeks to patients with geographic atrophy (EXPOSURE)*

Principal Investigator, 2015–2017

*Phase III, multicenter, randomized, double-masked, sham-controlled study to assess the efficacy and safety of lampalizumab administered intravitreally to patients with geographic atrophy secondary to age-related macular degeneration (PROXIMA)*

Principal Investigator, 2015–2018

*LHA510 proof-of-concept study as a maintenance therapy for patients with wet age-related macular degeneration*

Principal Investigator, 2015–2016

*A study investigating the efficacy and safety of lampalizumab intravitreal injections in patients with geographic atrophy secondary to age-related macular degeneration (CHROMA)*

Principal Investigator, 2014–2018

*Phase 2, multi-center study to compare the efficacy and safety of a chemokine CCR2/5 receptor antagonist with ranibizumab in adults with diabetic macular edema*

Principal Investigator, 2014–2015

*Prospective, two-cohort, single-masked study to evaluate the effect of ESBA1008 applied by microvolume injection or infusion in subjects with exudative age-related macular degeneration*

Principal Investigator, 2013–2015

*Phase 2 multicenter randomized clinical trial of ciliary neurotrophic factor (CNTF) for macular telangiectasia type 2 (MacTel)*

Principal Investigator, 2013–

*Prospective, randomized, double-masked, multicenter, two-arm study comparing the efficacy and safety of ESBA1008 versus Eylea® in subjects with exudative age-related macular degeneration*

Principal Investigator, 2013–2014

*A multicenter, open-label extension study to evaluate the long-term safety and tolerability of FCFD4514S in patients with geographic atrophy (OLEi, GX28198)*

Principal Investigator, 2012–2018

*A multicenter, randomized, sham-control, proof-of-concept study of intravitreal LFG316 in patients with geographic atrophy associated with age-related macular degeneration*

Principal Investigator, 2012–2015

*Efficacy and safety of squalamine lactate eye drops in subjects with neovascular (wet) age-related macular degeneration*

Principal Investigator, 2012–2015

*Safety and tolerability of intravenous LFG316 in wet age-related macular degeneration*

Principal Investigator, 2012–2013

*Single and repeat dose study of the safety and efficacy of AGN-150998 in patients with exudative age-related macular degeneration*

Principal Investigator, 2012

*Phase 1 multicenter open-label safety and tolerability clinical trial of ciliary neurotrophic factor (CNTF) in patients with macular telangiectasia Type 2 (MacTel)*

Principal Investigator, 2011–2016

*A study of safety, tolerability, and evidence of activity of FCFD4514S administered monthly or every other month to patients with geographic atrophy (MAHALO)*

Principal Investigator, 2011–2013

*Multicenter, 2 stage (open label, dose escalation, followed by masked, randomized) single dose study of the safety and efficacy of AGN-208397 in patients with macular edema (ME) associated with retinal vein occlusion (RVO)*

Principal Investigator, 2011–2012

*Phase 2b dose-ranging study of pazopanib eye drops versus ranibizumab intravitreal injections for the treatment of neovascular age-related macular degeneration*

Principal Investigator, 2010–2011

*Phase 2, randomized, double-masked, controlled trial to establish the safety and efficacy of intravitreal injections of E10030 (anti-PDGF PEGylated aptamer) given in combination with Lucentis® in subjects with neovascular age-related macular degeneration*

Principal Investigator, 2010–2011

*Impact of Lucentis on psychological morbidity in patients with macular edema and neovascularization secondary to retinal vein occlusion*

Principal Investigator, 2009–2012

*Phase 1a, multicenter, open-label, single-dose, dose-escalation study of the safety, tolerability, pharmacokinetics, and immunogenicity of intravitreal injections of FCFD4514S in patients with geographic atrophy*

Principal Investigator, 2009–2010

*Phase II, randomized, double-masked, placebo-controlled, add-on study to assess the efficacy of oral aliskiren 300 mg one daily for diabetic macular edema*

Principal Investigator, 2009–2010

*Phase III, double-masked, multicenter, randomized, active treatment-controlled study of the efficacy and safety of 0.5 mg and 2.0 mg ranibizumab administered monthly or on an as-needed basis (PRN) in patients with subfoveal neovascular age-related macular degeneration (HARBOR)*

Principal Investigator, 2009–2012

*Geographic Atrophy Treatment Evaluation (GATE) Study*

Principal Investigator, 2009–2012

*Phase 1, single ascending dose and parallel group trial to establish the safety, tolerability, and pharmacokinetic profile of multiple intravitreal injections of Volociximab ( $\alpha 5\beta 1$  integrin antagonist) as monotherapy or given in combination with Lucentis 0.5mg/eye in subjects with neovascular AMD (Ophthotech 3000)*

Principal Investigator, 2008–2012

*Phase 2, randomized, double-masked, placebo-controlled, dose-ranging clinical study to assess the safety and efficacy of subconjunctival injections of sirolimus in patients with DME secondary to diabetic retinopathy*

Principal Investigator, 2008–2010

*Anecortave acetate for treatment of steroid-induced intraocular pressure (IOP) elevation*

Principal Investigator, 2008–2010

*Natural History of Geographic Atrophy Progression (GAP) Study*

Principal Investigator, 2008–2009

*A study of ranibizumab injection in subjects with clinically significant macular edema center involvement secondary to diabetes mellitus (RIDE)*

Principal Investigator, 2007–2012

*Indocyanine green (ICG) angiographic evaluation of ranibizumab (Lucentis<sup>®</sup>) treatment of pigment epithelial detachment (PED) associated with age-related macular degeneration (AMD)*

Principal Investigator, 2007–2009

*A masked, multicenter, randomized, controlled trial to assess the safety and efficacy of 700 µg dexamethasone posterior segment drug delivery system (DEX PS DDS) applicator system in combination with laser photocoagulation compared with laser photocoagulation alone in the treatment of subjects with diffuse diabetic macular edema*

Principal Investigator, 2007–2009

*OMEGA: A randomized, double-masked, dose-ranging, multi-center, Phase II study comparing the safety and efficacy of OT-551 with placebo to treat geographic atrophy associated with age-related macular degeneration.*

Principal Investigator, 2007–2009

*Phase 1, single ascending dose trial to establish the safety, tolerability, and pharmacokinetic profile of intravitreal injections of E10030 (anti-PDGF PEGylated aptamer) monotherapy and of E10030 given in combination with Lucentis 0.3mg/eye in subjects with neovascular AMD (Ophthotech 1000)*

Principal Investigator, 2007–2008

*COBALT: COmbining Bevasiranib And Lucentis Therapy. A phase III, randomized, double-masked, parallel-assignment study of intravitreal bevasiranib sodium, administered every 8 or 12 weeks as maintenance therapy following three injections of Lucentis®, compared with Lucentis® monotherapy every 4 weeks in patients with exudative age-related macular degeneration (AMD)*

Principal Investigator, 2007–2008

*Denali: A 24-month randomized, double-masked, controlled, multicenter, phase IIIB study assessing safety and efficacy of verteporfin (Visudyne®) photodynamic therapy administered in conjunction with ranibizumab (Lucentis™) versus ranibizumab (Lucentis™) monotherapy in patients with subfoveal choroidal neovascularization secondary to age-related macular degeneration*

Principal Investigator, 2007

*Macugen (pegaptanib sodium) for pathological myopia complicated by subfoveal choroidal neovascularization*

Principal Investigator, 2006–2010

*Macugen (pegaptanib sodium) for angioid streaks and other uncommon conditions complicated by choroidal neovascular membrane*

Principal Investigator, 2006–2010

*Study of the efficacy and safety of intravitreal injection of Macugen for neovascular lesions of AMD with recent onset*

Principal Investigator, 2006–2008



*A Phase IIIb, multicenter study to evaluate the safety and tolerability of ranibizumab in naïve and previously treated subjects with choroidal neovascularization secondary to age-related macular degeneration (SAILOR)*

Principal Investigator, 2006–2007

*A 3-year, Phase III, multicenter, masked, randomized, sham-controlled trial to assess the safety and efficacy of 700 µg and 350 µg dexamethasone posterior segment drug delivery system (DEX PS DDS) applicator system in the treatment of patients with diabetic macular edema*

Principal Investigator, 2006–2007

*Natural history and registry study of macular telangiectasia (MacTel)*

Principal Investigator, 2005–

*Interval Dose Evaluation of Anecortave Acetate (IDEAA)*

Principal Investigator, 2005–2008

*A 6-month, Phase III, multicenter, masked, randomized, sham-controlled trial (with 6-month open-label extension) to assess the safety and efficacy of 700 µg and 350 µg dexamethasone posterior segment drug delivery system (DEX PS DDS) applicator system in the treatment of patients with macular edema following branch retinal vein occlusion or central retinal vein occlusion*

Principal Investigator, 2005–2007

*RNAi Assessment of Cand5 in Diabetic Macular Edema (RACE)*

Principal Investigator, 2005–2007

*Cand5 Anti-VEGF RNAi Evaluation (CARE): Phase 2 dose comparison of Cand5 for subfoveal choroidal neovascularization associated with wet age-related macular degeneration*

Principal Investigator, 2005–2007

*Veritas: A 24-month randomized, double-masked, sham controlled, multicenter, phase IIIB study comparing photodynamic therapy with verteporfin (Visudyne<sup>®</sup>) plus two different dose regimens of intravitreal triamcinolone acetonide (1 mg and 4 mg) versus Visudyne<sup>®</sup> plus intravitreal pegaptanib (Macugen<sup>®</sup>) in patients with subfoveal choroidal neovascularization secondary to age-related macular degeneration*

Principal Investigator, 2005–2006

*Phase IV study of daily dosing (vs. previous “on demand”) of Cialis vs. Viagra vs. placebo and its effect on visual functioning in healthy males or those with mild erectile dysfunction*

Principal Investigator, 2005–2006

*A Phase II, dose ranging, open-labeled, multi-center study to evaluate the safety and efficacy of combretastatin A4 phosphate for treating subfoveal choroidal neovascularization in subjects with pathologic myopia*

Principal Investigator, 2005–2006

*Protein Kinase C  $\beta$  Inhibitor Study B7A-MC-MBDL, Reduction in the occurrence of center-threatening diabetic macular edema*

Principal Investigator, 2004–2010

*Anecortave Acetate Risk-Reduction Trial (AART)*

Principal Investigator, 2004–2008

*Protocol A43221001: A Phase 1 / 2 randomized, masked, placebo-controlled, single and multiple-dose, sequential dose escalation study of the safety and efficacy of AG-013958 in subjects with subfoveal choroidal neovascularization associated with age-related macular degeneration*

Principal Investigator, 2004–2006

*A randomized, single-masked, multicenter, Phase 2 evaluation of the effect of photodynamic therapy using verteporfin (Visudyne<sup>®</sup> Therapy) in combination with intravitreal injection of either 0 mg, 1 mg, or 4 mg of triamcinolone acetonide in occult subfoveal and minimally classic subfoveal choroidal neovascularization (CNV) secondary to age-related macular degeneration (AMD): Visudyne with Intravitreal Triamcinolone Acetonide (VisTA) Trial*

Principal Investigator, 2004–2006

*The Implantable Miniature Telescope (IMT<sup>™</sup>) in patients with central vision impairment associated with age-related macular degeneration or Stargardt's macular dystrophy*

Principal Investigator, 2003–2005

*Open-label evaluation of long-term efficacy and safety of posterior juxtасcleral injections of anecortave acetate 15 mg in patients with subfoveal exudative age-related macular degeneration (C-03-15) (AMD)*

Principal Investigator, 2003

*Protein Kinase C  $\beta$  Inhibitor Studies, Diabetic Retinopathy Study 2*

Principal Investigator, 2001–2006

*Visudyne<sup>™</sup> Early Retreatment (VER) Study: Multicenter, randomized, parallel group, double-masked, controlled phase IIIB, 2-year study comparing the efficacy and safety of Visudyne<sup>™</sup> therapy with early retreatment to standard treatment in predominantly classic subfoveal choroidal neovascularization secondary to age-related macular degeneration*

Principal Investigator, 2001–2004

*Oculex Study: A Phase 2 randomized, multicenter, dose-ranging, controlled, parallel-group trial to assess the safety and effectiveness of dexamethasone posterior segment drug delivery system (DEX PS DDS<sup>®</sup>) in the treatment of persistent macular edema*

Principal Investigator, 2001–2004

*Visudyne™ with Altered (Delayed) Light in Occult (VALIO) Study: A randomized, controlled, masked, multicenter, phase II study of the effect of Visudyne™ therapy with delayed light application in occult with no classic subfoveal choroidal neovascularization secondary to age-related macular degeneration*

Principal Investigator, 2001–2003

*Feeder Vessel Study: Phase I randomized, single-blinded, placebo-controlled, two-armed, parallel group design study of enhanced ICG laser photocoagulation of choroidal neovascular feeder vessels in patients with age-related macular degeneration*

Principal Investigator, 2001–2002

*TTT4CNV Study: Transpupillary thermotherapy for subfoveal occult choroidal neovascularization in age-related macular degeneration*

Principal Investigator, 2000–2004

*EOP1001: Safety and pharmacokinetic profile of 3 consecutive intravitreal injections in patients with exudative AMD who are scheduled to receive photodynamic therapy (PDT) with Visudyne*

Principal Investigator, 2000–2002

*EOP1000: Phase IB open-label multicenter trial to establish the safety and pharmacokinetic profile of three consecutive injections of EYE001 (anti-VEGF PEGylated aptamer) in patients with age-related macular degeneration without previous or concomitant photodynamic therapy with Visudyne*

Principal Investigator, 2000–2002

*Phase I open-label trial of NX1838 (anti-VEGF) to establish the safety and pharmacokinetic profile in patients with age-related macular degeneration*

Principal Investigator, 2000–2001

*Evaluation of efficacy and safety of a sub-Tenon's injection of anecortave acetate sterile suspension versus placebo in patients with exudative age-related macular degeneration (AMD) following treatment with photodynamic therapy (PDT) using Visudyne™*

Principal Investigator, 2000–2001

*Phase I, multicenter study of the safety, tolerability, pharmacokinetics, and activity of single-dose intravitreal injection of rhuFab V2 in subjects with neovascular age-related macular degeneration*

Principal Investigator, 1999–2001

*Verteporfin in Age-related Macular degeneration (VAM) Study: Open-label, multicenter, safety study of the treatment of predominantly classic choroidal neovascularization secondary to age-related macular degeneration using photodynamic therapy with verteporfin for injection*

Principal Investigator, 1999–2000

*Verteporfin in Photodynamic Therapy Study*

Principal Investigator, 1998–2003

Member, TAP/VIP Study Advisory Group, July 2000–June 2001

*Protein kinase C  $\beta$  inhibitor studies: Diabetic Macular Edema Study and Diabetic Retinopathy Study*

Principal Investigator, 1998–2002

*Evaluation of safety and duration of efficacy of anecortave acetate sterile suspension versus placebo following a single sub-Tenon's injection for the inhibition of neovascularization in patients with exudative age-related macular degeneration*

Principal Investigator, 1998–2001

*Study of the matrix metalloproteinase inhibitor, AG3340, in patients with subfoveal choroidal neovascularization associated with age-related macular degeneration*

Principal Investigator, 1998–2001

*Ocular Coherence Tomography Study*

Principal Investigator, 1997–2000

*Treatment of Age-related Macular Degeneration with Photodynamic Therapy (TAP)*

Principal Investigator, 1996–2002

Member, TAP/VIP Study Advisory Group, July 2000–June 2001

*Age-related Macular Degeneration and Thalidomide Study*

Principal Investigator, 1996–2000

*Laser to Drusen Trial*

Principal Investigator, 1995–2000

*Collaborative Study on Indocyanine Green Angiography. A study with the four other centers with the most extensive ICG experience in the country*

Principal Investigator, 1993–2000

*Alfa-interferon treatment of choroidal neovascularization: a randomized clinical trial*

Principal Investigator, 1993–1994

---

*Phase III randomised, double-masked, parallel group, multicentre study to compare the efficacy, safety, pharmacokinetics and immunogenicity between SB11 and Lucentis in subjects with neovascular age-related macular degeneration*

Co-investigator, 2018–

*Phase 2b/3 multicenter, randomized, double-masked, dose-ranging study comparing the efficacy and safety of emixustat hydrochloride (ACU-4429) with placebo for the treatment of geographic atrophy associated with dry age-related macular degeneration (SEATTLE)*

Co-investigator, 2013–2016

*Safety and efficacy study of gevokizumab to treat non-infectious uveitis controlled with systemic treatment (EYEGUARD™-C)*

Co-investigator, 2012–2015

*Safety and efficacy study of gevokizumab to treat active non-infectious uveitis (EYEGUARD™-A)*

Co-investigator, 2012–2015

*Ocriplasmin for treatment for symptomatic vitreomacular adhesion including macular hole (OASIS)*

Co-investigator, 2012–2014

*Multi-center, double-masked, parallel group, placebo-controlled study to assess the efficacy and safety of voclosporin as therapy in subjects with active noninfectious intermediate, posterior, or pan-uveitis*

Co-investigator, 2011–2013

*Randomized, placebo controlled, double-masked, multicenter trial of microplasmin intravitreal injection for non-surgical treatment of focal vitreomacular adhesion*

Co-investigator, 2008–2010

*Sirion Phase II randomized, double-masked, placebo-controlled, dose-comparison study of the safety and efficacy of fenretinide in the treatment of geographic atrophy in age-related macular degeneration*

Co-investigator, 2007–2010

*Age-related Macular Degeneration: Detection of Onset of new Choroidal neovascularization (AMD DOC) study comparing preferential hyperacuity perimetry (PHP) with supervised Amsler grid in detecting AMD for earlier treatment in high-risk fellow eyes (Johns Hopkins)*

Co-investigator, 2007–2009

*Small Interfering RNA In Macular Degeneration Study (SIRIUS): A 2 year, multicenter, randomized, controlled, masked, dose-finding trial to assess the safety and efficacy of multiple intravitreal injections of AGN211745 (small interfering RNA) in subjects with subfoveal CNV secondary to AMD*

Co-investigator, 2007–2008

*A multicenter, randomized, placebo-controlled, double-masked, parallel group, dose-ranging clinical trial of intravitreal microplasmin in patients undergoing surgical vitrectomy: The MIVI III (Microplasmin for Vitreous Injection III) Trial*

Co-investigator, 2007–2008

*Eyetech 1023: Phase IV, open label, multicenter trial of maintenance intravitreal injections of Macugen® (pegaptanib sodium) given every 6 weeks for 48 weeks in subjects with subfoveal neovascular age-related macular degeneration (AMD) initially treated with a modality resulting in maculopathy improvement*

Co-investigator, 2006–2008

*The effect of ruboxistaurin on clinically significant macular edema in patients with diabetes mellitus, as assessed by optical coherence tomography*

Co-investigator, 2005–2011

*Visudyne Patient Registry*

Co-investigator, 2005–2007

*A multi-center, double-masked, randomized, vehicle-controlled, parallel group evaluation of the safety and efficacy of OT-551 ophthalmic solution to prevent formation or delay progression of nuclear cataract formation in post-vitrectomy patients*

Co-investigator, 2005–2007

*Eyetech 1012: A Phase 4, randomized, active controlled, double masked, single dummy, multi-center comparative trial, in parallel groups, to compare the safety and efficacy of intravitreal injections of Macugen® given every 6 weeks for 102 weeks plus sham photodynamic therapy (PDT), to Macugen® plus PDT with Visudyne in subjects with predominantly classic subfoveal choroidal neovascularization (CNV) secondary to age-related macular degeneration (AMD)*

Co-investigator, 2005–2007

*A Phase 1 open-label study for the evaluation of tolerability of four dose levels of Cand5 administered by single intravitreal injection in patients with wet age-related macular degeneration*

Co-investigator, 2005–2007

*A randomized, double-masked, placebo-controlled, parallel group, multicenter, dose-ranging study of denofosol tetrasodium (INS37217) intravitreal injection in subjects with rhegmatogenous retinal detachment*

Co-investigator, 2004–2005

*CLEAR: A multi-center, open, label, flexible-dose, parallel-group evaluation of the cataractogenic potential of SEROQUEL™ and RISPERDAL™ in the long-term treatment of subjects with schizophrenia and schizoaffective disorder*

Co-investigator, 2004–2005

*Intravitreal Steroid Injection Studies (ISIS)*

Co-investigator, 2002–2006

*EOP1005: A Phase II randomized, controlled, double-masked, dose-finding, multi-center, comparative trial, in parallel groups, to establish the safety and preliminary efficacy of intravitreal injections of EYE001 (anti-VEGF PEGylated aptamer), given every 6 weeks for 12 to 30 weeks to patients with clinically significant diabetic macular edema (CSME) involving the center of the macula*

Co-investigator, 2002–2003

*Fluocinolone Acetonide in Diabetic Macular Edema (FAME 4) Study: a multicenter, randomized, masked, controlled study to evaluate the safety and efficacy of Retisert™, an intravitreal fluocinolone acetonide implant, in the treatment of patients with diabetic macular edema*

Co-investigator, 2001–2007

*Vitrase™ for Vitreous Hemorrhage Study*

Co-investigator, 1998–1999

*Human Insulin Analogue Study*

Co-investigator, 1997

*Diabetes Aminoguanidine/Pimagedine Trial*

Co-investigator, 1996

*Oculon Study: Evaluation of the efficacy of OC-2 in the inhibition of cataract formation associated with vitrectomy surgery*

Co-investigator, 1993–1994

*Hydrokinetic retinal manipulation using the viscous fluid perfluorocarbon perfluorophenanthrene study*

Co-investigator, 1993–1994

## PUBLICATIONS

### *Books*

1. Singerman LJ, Wrzosek JA. *The History of the Macula Society: 1977 to 2012*.
2. Bressler NM, Lim J, Rosenfeld P, Sapinski S, Schachat A, Singerman LJ, Williams G. *Educational Initiatives in AMD and Related Retinal Diseases*. Second Edition. London: Chameleon Medical Communications, 2002.
3. Singerman LJ, Coscas G (eds.). *Current Techniques in Ophthalmic Laser Surgery*. Philadelphia: Current Medicine, 1999.

4. Singerman LJ, Jampol LM (eds.). *Retinal and Choroidal Manifestations of Systemic Disease*. Baltimore: Williams and Wilkins, 1991.

### **Book Chapters**

1. Rao LJ, Singerman LJ. Thermal laser and photodynamic therapy. In Duker JS, Witkin AJ (eds.). *Age-related Macular Degeneration: Current Management*. Thorofare, New Jersey: Slack Inc., 2014. pp. 111-119.
2. Singerman LJ, Sharma MC, Hornik JH. Pegaptanib sodium therapy. In Peyman GA, Meffert SA, Conway MD. *Vitreoretinal Surgical Techniques*. London: Informa UK Ltd, 2007, pp.634-641.
3. Miller DG, Sharma MC, Singerman LJ. Laser treatment of age-related macular degeneration. In Boyd BF, Boyd S (eds.). *Retinal and Vitreoretinal Surgery: Mastering the Latest Techniques*. Panama: Highlights of Ophthalmology Press, 2005, pp. 250-261.
4. Singerman LJ. Pharmacology for age-related macular degeneration. *Retina Handbook*. Bloomfield, NJ: Jobson, 2004, pp.12-15.
5. Miller DG, Singerman LJ. Key questions for a focused history. In Steidl SM, Hartnett ME (eds.). *Clinical Pathways in Vitreoretinal Disease*. New York: Thieme, 2003, pp 3-12.
6. Miller DG, Singerman LJ. Laser treatment of age-related macular degeneration. In Boyd BF, Boyd S (eds.). *Retinal and Vitreoretinal Surgery: Mastering the Latest Techniques*. Panama: Highlights of Ophthalmology Press, 2002, pp 249-261.
7. Pendergast SD, Singerman LJ. Choroidal ruptures. In Fraunfelder FT, Roy FH (eds.). *Current Ocular Therapy*. Philadelphia: WB Saunders Company, 2000, pp 313-314.
8. Zegarra H, Finkelstein D, Singerman LJ, Niffenegger JH. Laser management of branch and central retinal vein occlusions. In Singerman LJ, Coscas G (eds.). *Current Techniques in Ophthalmic Laser Surgery*. Philadelphia: Current Medicine, 1999, pp 67-76.
9. Pendergast SD, Singerman LJ. Lasers in the treatment of proliferative retinopathies. In Singerman LJ, Coscas G (eds.). *Current Techniques in Ophthalmic Laser Surgery*. Philadelphia: Current Medicine, 1999, pp 35-54.
10. Niffenegger JH, Pendergast SD, Singerman LJ. Photocoagulation of other causes of choroidal neovascularization. In Singerman LJ, Coscas G (eds.). *Current Techniques in Ophthalmic Laser Surgery*. Philadelphia: Current Medicine, 1999, pp 91-110.
11. Niffenegger JH, Pendergast SD, Singerman LJ. Laser management of less common macular diseases. In Singerman LJ, Coscas G (eds.). *Current Techniques in Ophthalmic Laser Surgery*. Philadelphia: Current Medicine, 1999, pp 111-128.



12. Zegarra H, Singerman LJ, Pendergast SD. Central retinal vein occlusion. In Saer JB (ed.). *Vitreo-Retinal and Uveitis Update. Proceedings of the New Orleans Academy of Ophthalmology Symposium*. The Hague: Kugler Publications, 1998.
13. Roy CE, Singerman LJ. Ocular coherence tomography (OCT). In Saer JB (ed.). *Vitreo-Retinal and Uveitis Update. Proceedings of the New Orleans Academy of Ophthalmology Symposium*. The Hague: Kugler Publications, 1998, pp 275-296.
14. Pendergast SD, Singerman LJ, Niffenegger JH, Zegarra H. Laser treatment for proliferative diabetic retinopathy. In Saer JB (ed.). *Vitreo-Retinal and Uveitis Update. Proceedings of the New Orleans Academy of Ophthalmology Symposium*. The Hague: Kugler Publications, 1998, pp 97-121.
15. Miller DG, Singerman LJ. Diabetic retinopathy: medical considerations. In Saer JB (ed.). *Vitreo-Retinal and Uveitis Update. Proceedings of the New Orleans Academy of Ophthalmology Symposium*. The Hague: Kugler Publications, 1998, pp 239-244.
16. Singerman LJ, Niffenegger JH, Pendergast SD. Less common causes of choroidal neovascularization. In Saer JB (ed.). *Vitreo-Retinal and Uveitis Update. Proceedings of the New Orleans Academy of Ophthalmology Symposium*. The Hague: Kugler Publications, 1998, pp 7-41.
17. Niffenegger JH, Singerman LJ. Other causes of choroidal neovascularization. In Guyer DR, Yannuzzi LA, Chang S, Shields J, Green WR (eds.). *Retina, Vitreous, Macula: A Comprehensive Text*. Philadelphia: Saunders, 1998.
18. Sugin SL, Singerman LJ, Yannuzzi LA. Angioid Streaks. In Roy FH (ed.). *Master Techniques in Ophthalmic Surgery*. Philadelphia: Lea & Febiger, 1995, pp 53-59.
19. Singerman LJ, Addiego R, Lamkin JC, Zegarra H. Laser treatment of less common macular diseases. In Karlin DB (ed.). *Lasers in Ophthalmic Surgery*. Cambridge, Mass: Blackwell Scientific Publications, Inc, 1995, pp 152-178.
20. Zegarra H, Zakov ZN, Singerman LJ, Lamkin JC. Laser treatment of retinal vein occlusions. In Karlin DB (ed.). *Lasers in Ophthalmic Surgery*. Cambridge, Mass: Blackwell Scientific Publications, Inc, 1995, pp 140-151.
21. Singerman LJ, Lamkin JC, Addiego R, Zegarra H. Laser treatment of choroidal neovascularization. In Karlin DB (ed.). *Lasers in Ophthalmic Surgery*. Cambridge, Mass: Blackwell Scientific Publications, Inc, 1995, pp 112-139.
22. Singerman LJ, Fine SL. Wavelength selection: Its importance for laser treatment of retinal and choroidal disease. In Schachat AP (ed.). *Current Practice in Ophthalmology*. St. Louis: Mosby Year Book, 1992, pp 355-368.

23. Saggau DD, Singerman LJ. Cystoid macular edema: causes, diagnosis and treatment. In Weinstock FJ (ed.). *Management and Care of the Cataract Patient*. Boston: Blackwell Scientific Publications, Inc, 1992, pp 308-322.
24. Sunness JS, Gass JDM, Singerman LJ, Ober RR, Soubrane G, Aiello LM. Retinal and choroidal changes in pregnancy. In Singerman LJ, Jampol LM (eds.). *Retinal and Choroidal Manifestations of Systemic Disease*. Baltimore: Williams and Wilkins, 1991, pp 262-286.
25. Flood TP, Orth DH, Singerman LJ. Complications of krypton red laser photocoagulation for choroidal neovascularization. In Blodi F, Brancato R, Christini G, et al (eds.). *Acta XXV Concilium Ophthalmologicum*. Milano: Ghedini Editore, 1988, pp 2063-2074.
26. Singerman LJ. Laser photocoagulation for choroidal neovascularization associated with hemorrhagic pigment epithelial detachment. In Blodi F, Brancato R, Christini G, et al (eds.). *Acta XXV Concilium Ophthalmologicum*. Milano: Ghedini Editore, 1988, pp 2231-2236.
27. Singerman LJ, Novak MA. Subretinal neovascularization. In Yannuzzi LA (ed.). *Laser Photocoagulation of the Macula*. Philadelphia: JB Lippincott, 1989, pp 27-46.
28. Singerman LJ. Laser photocoagulation for choroidal neovascularization associated with pigment epithelial detachment. In Gitter KA, Schatz H, Yannuzzi L, McDonald HR (eds.). *Laser Photocoagulation of Retinal Disease*. San Francisco: Pacific Medical Press, 1988, pp 201-215.
29. Singerman LJ. Laser photocoagulation for choroidal neovascularization associated with pigment epithelial detachment in patients over the age of 55. In Brancato R, Coscas G, Lumbroso B (eds.). *Retinal Diseases 2*. Amsterdam-Berkeley/Milano: Kugler Publications/Ghedini Editore, 1987, pp 39-46.
30. Singerman LJ. Stries angioides: traitement par le laser a argon et le laser a krypton. In Coscas G, Soubrane G (eds.). *Neovaisseaux Sous-Retiniens Maculaires et Laser*. Paris: Doin, 1987, pp 221-223.
31. Singerman LJ, Rice TA, Passloff R. Krypton laser scatter treatment for proliferative diabetic retinopathy. In Ryan SJ, Dawson AK, Little HL (eds.). *Retinal Diseases*. Orlando: Grune & Stratton, 1985, pp 43-46.
32. Singerman LJ. Diabetic retinopathy in juvenile onset diabetes: 1. Laser therapy in high-risk proliferatives. 2. The effects of pregnancy. In Fine SL, Owens SL (eds.). *Management of Retinal Vascular and Macular Disorders*. Baltimore: Williams & Wilkins, 1983, pp 43-46.
33. Rodman H, Singerman LJ, Aiello L, Merkatz I. Diabetic retinopathy and its relationship to pregnancy. In Merkatz I, Adam PJ (eds.). *Diabetes and Pregnancy: A Perinatal Perspective*. New York: Grune and Stratton, 1979, pp 73-91.

**Journal Articles**

1. Chew EY, Clemons TE, Jaffe GJ, Johnson CA, Farsiu S, Lad EM, Guymer R, Rosenfeld P, Hubschman JP, Constable I, Wiley H, Singerman LJ, Gillies M, Comer G, Blodi B, Elliott D, Yan J, Bird A, Friedlander M; Macular Telangiectasia Type 2-Phase 2 CNTF Research Group. Effect of ciliary neurotrophic factor on retinal neurodegeneration in patients with macular telangiectasia type 2: a randomized clinical trial. *Ophthalmology*. 2018 Oct 4. pii: S0161-6420(18)31427-1. doi: 10.1016/j.ophtha.2018.09.041. [Epub ahead of print]
2. Yu JJ, Agrón E, Clemons TE, Domalpally A, van Asten F, Keenan TD, Cukras C, Chew EY; Age-Related Eye Disease Study 2 Research Group. Natural history of drusenoid pigment epithelial detachment associated with age-related macular degeneration: Age-Related Eye Disease Study 2 report no. 17. *Ophthalmology*. 2018 Aug 22. pii: S0161-6420(18)31752-4. doi: 10.1016/j.ophtha.2018.08.017. [Epub ahead of print].
3. Keenan TD, Agrón E, Domalpally A, Clemons TE, van Asten F, Wong WT, Danis RG, Sadda S, Rosenfeld PJ, Klein ML, Ratnapriya R, Swaroop A, Ferris FL 3rd, Chew EY; AREDS2 Research Group. Progression of geographic atrophy in age-related macular degeneration: AREDS2 Report Number 16. *Ophthalmology*. 2018;125:1913-1928.
4. Jampol LM, Glassman AR, Liu D, Aiello LP, Bressler NM, Duh EJ, Quaggin S, Wells JA, Wyckoff CC; Diabetic Retinopathy Clinical Research Network. Plasma vascular endothelial growth factor concentrations after intravitreal anti-vascular endothelial growth factor therapy for diabetic macular edema. *Ophthalmology*. 2018;125:1054-1063.
5. Purnell JQ, Braffett BH, Zinman B, Gubitosi-Klug RA, Sivitz W, Bantle JP, Ziegler G, Cleary PA, Brunzell JD; DCCT/EDIC Research Group. Impact of excessive weight gain on cardiovascular outcomes in Type 1 Diabetes: results from the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Study. *Diabetes Care*. 2017;40:1756-1762.
6. Dugel PU, Jaffe GJ, Sallstig P, Warburton J, Weichselberger A, Wieland M, Singerman L. Brolucizumab versus aflibercept in participants with neovascular age-related macular degeneration: a randomized trial. *Ophthalmology*. 2017.124:1296-1304.
7. DCCT/EDIC Research Group, Nathan DM, Bebu I, Hainsworth D, Klein R, Tamborlane W, Lorenzi G, Gubitosi-Klug R, Lachin JM. Frequency of evidence-based screening for retinopathy in Type 1 diabetes. *N Engl J Med*. 2017 Apr 20;376:1507-1516.
8. Chen Z, Miao F, Paterson AD, Lachin JM, Zhang L, Schones DE, Wu X, Wang J, Tompkins JD, Genuth S, Braffett BH, Riggs AD; DCCT/EDIC Research Group, Natarajan R. Epigenomic profiling reveals an association between persistence of DNA methylation and metabolic memory in the DCCT/EDIC type 1 diabetes cohort. *Proc Natl Acad Sci U S A*. 2016;113(21):E3002-3011.
9. Lenherr SM, Clemens JQ, Braffett BH, Cleary PA, Dunn RL, Hotaling JM, Jacobson AM, Kim C, Herman W, Brown JS, Wessells H, Sarma AV; DCCT/EDIC Research Group.

- Glycemic control and urinary tract infections in women with type 1 diabetes: Results from the DCCT/EDIC. *J Urol.* 2016;196:1129-1135.
10. Chang P, Tan A, Jaffe GJ, Fleckenstein M, Holz FG, Schmitz-Valckenberg S; GAP Study Group. Analysis of peripapillary atrophy in relation to macular geographic atrophy in age-related macular degeneration. *Invest Ophthalmol Vis Sci.* 2016;57:2277-2282.
  11. AREDS2 Research Group, Al-Holou SN, Tucker WR, Agrón E, Clemons TE, Sperduto RD, Ferris FL 3rd, Chew EY. The association of statin use with cataract progression and cataract surgery: The AREDS2 Report Number 8. *Ophthalmology.* 2016;123:916-917.
  12. Shah N, Maguire MG, Martin DF, Shaffer J, Ying GS, Grunwald JE, Toth CA, Jaffe GJ, Daniel E; Comparison of Age-related Macular Degeneration Treatments Trials Research Group. Angiographic cystoid macular edema and outcomes in the Comparison of Age-Related Macular Degeneration Treatments Trials. *Ophthalmology.* 2016;123:858-864.
  13. Daniel E, Shaffer J, Ying GS, Grunwald JE, Martin DF, Jaffe GJ, Maguire MG; Comparison of Age-Related Macular Degeneration Treatments Trials (CATT) Research Group. Outcomes in eyes with retinal angiomatous proliferation in the Comparison of Age-Related Macular Degeneration Treatments Trials (CATT). *Ophthalmology.* 2016;123:609-616.
  14. Wells JA, Glassman AR, Jampol LM, Aiello LP, Antoszyk AN, Baker CW, Bressler NM, Browning DJ, Connor CG, Elman MJ, Ferris FL, Friedman SM, Melia M, Pieramici DJ, Sun JK, Beck RW; Diabetic Retinopathy Clinical Research Network. Association of baseline visual acuity and retinal thickness with 1-year efficacy of aflibercept, bevacizumab, and ranibizumab for diabetic macular edema. *JAMA Ophthalmol.* 2016;134:127-134.
  15. Bressler SB, Ayala AR, Bressler NM, Melia M, Qin H, Ferris FL 3rd, Flaxel CJ, Friedman SM, Glassman AR, Jampol LM, Rauser ME; Diabetic Retinopathy Clinical Research Network. Persistent macular thickening after ranibizumab treatment. *JAMA Ophthalmol.* 2016 Mar 1;134:278-285.
  16. Aref AA, Scott IU, Oden NL, Ip MS, Blodi BA, VanVeldhuisen PC; SCORE Study Investigator Group. Incidence, risk factors, and timing of elevated intraocular pressure after intravitreal triamcinolone acetonide injection for macular edema secondary to retinal vein occlusion: SCORE study report 15. *JAMA Ophthalmol.* 2015;133:1022-1029.
  17. Eny KM, Orchard TJ, Miller RG, Maynard J, Grant DM, Costacou T, Cleary PA, Braffett BH, Paterson AD; DCCT/EDIC Research Group. Caffeine consumption contributes to skin intrinsic fluorescence in Type 1 diabetes. *Diabetes Technol Ther.* 2015;17:726-734.
  18. Aiello LP, Ayala AR, Antoszyk AN, Arnold-Bush B, Baker C, Bressler NM, Elman MJ, Glassman AR, Jampol LM, Melia M, Nielsen J, Wolpert HA; Diabetic Retinopathy Clinical Research Network. Assessing the effect of personalized diabetes risk assessments

- during ophthalmologic visits on glycemic control: a randomized clinical trial. *JAMA Ophthalmol.* 2015;133:888-896.
19. Han IC, Singerman LJ, Schmaier A, Bressler NM. Bilateral, multiple, episodic retinal vein occlusions associated with common variable immunodeficiency. *JAMA Ophthalmol* 2015;133:1216-1218.
  20. Willoughby AS, Ying GS, Toth CA, Maguire MG, Burns RE, Grunwald JE, Daniel E, Jaffe GJ; Comparison of Age-Related Macular Degeneration Treatments Trials Research Group. Subretinal hyperreflective material in the Comparison of Age-Related Macular Degeneration Treatments Trials. *Ophthalmology* 2015;122:1846-1853.
  21. Bressler SB, Almkhatar T, Bhorade A, Bressler NM, Glassman AR, Huang SS, Jampol LM, Kim JE, Melia M; Diabetic Retinopathy Clinical Research Network Investigators. Repeated intravitreal ranibizumab injections for diabetic macular edema and the risk of sustained elevation of intraocular pressure or the need for ocular hypotensive treatment. *JAMA Ophthalmol* 2015;133:589-597.
  22. DCCT/EDIC Research Group, Aiello LP, Sun W, Das A, Gangaputra S, Kiss S, Klein R, Cleary PA, Lachin JM, Nathan DM. Intensive diabetes therapy and ocular surgery in type 1 diabetes. *N Engl J Med* 2015 Apr 30;372:1722-1733.
  23. Diabetic Retinopathy Clinical Research Network, Wells JA, Glassman AR, Ayala AR, Jampol LM, Aiello LP, Antoszyk AN, Arnold-Bush B, Baker CW, Bressler NM, Browning DJ, Elman MJ, Ferris FL, Friedman SM, Melia M, Pieramici DJ, Sun JK, Beck RW. Aflibercept, bevacizumab, or ranibizumab for diabetic macular edema. *N Engl J Med* 2015 Mar 26;372:1193-1203.
  24. Friedman SM(1), Almkhatar TH, Baker CW, Glassman AR, Elman MJ, Bressler NM, Maker MP, Jampol LM, Melia M; Diabetic Retinopathy Clinical Research Network. Topical nepafenec in eyes with noncentral diabetic macular edema. *Retina* 2015;35:944-956.
  25. Altaweel MM, Daniel E, Martin DF, Mittra RA, Grunwald JE, Lai MM, Melamud A, et al; Maguire MG; Comparison of Age-related Macular Degeneration Treatments Trials (CATT) Research Group. Outcomes of eyes with lesions composed of >50% blood in the Comparison of Age-Related Macular Degeneration Treatments Trials (CATT). *Ophthalmology* 2015;122:391-398.
  26. Chew EY, Clemons TE, Peto T, Sallo FB, Ingerman A, Tao W, Singerman L, Schwartz SD, Peachey NS, Bird AC; MacTel-CNTF Research Group. Ciliary neurotrophic factor (CNTF) for macular telangiectasia Type 2 (MacTel): Results from a phase I safety trial. *Am J Ophthalmol* 2015;159:659-666.
  27. Boyer DS, Goldbaum M, Leys AM, Starita C; for the V.I.S.I.O.N. Study Group. Effect of pegaptanib sodium 0.3 mg intravitreal injections (Macugen) in intraocular pressure: posthoc analysis from V.I.S.I.O.N. study. *Br J Ophthalmol* 2014 Nov;98:1543-1546.

28. Folgar FA, Jaffe GJ, Ying GS, Maguire MG, Toth CA; Comparison of Age-Related Macular Degeneration Treatments Trials Research Group. Comparison of optical coherence tomography assessments in the comparison of age-related macular degeneration treatments trials. *Ophthalmology*. 2014 Oct;121(10):1956-1965.
29. Simpson CL, Wojciechowski R, Oexle K, Murgia F, Portas L, Li X, Verhoeven VJ, et al; DCCT/EDIC Research Group. Genome-wide meta-analysis of myopia and hyperopia provides evidence for replication of 11 loci. *PLoS One* 2014 Sep 18;9(9):e107110. doi: 10.1371/journal.pone.0107110. eCollection 2014.
30. Kim BJ, Ying GS, Huang J, Levy NE, Maguire MG; CATT Research Group. Sporadic visual acuity loss in the Comparison of Age-Related Macular Degeneration Treatments Trials (CATT). *Am J Ophthalmol*. 2014;158:128-135.
31. Hagstrom SA, Ying GS, Pauer GJ, Sturgill-Short GM, Huang J, Maguire MG, Martin DF; Comparison of Age-Related Macular Degeneration Treatments Trials (CATT) Research Group. VEGFA and VEGFR2 gene polymorphisms and response to anti-vascular endothelial growth factor therapy: comparison of age-related macular degeneration treatments trials (CATT). *JAMA Ophthalmol* 2014;132:521-527.
32. Oh J, Marks AL, Wessell KR, Tcheurekdjian H, Venglarcik J, Singerman LJ, Hostoffer RW Jr. Common variable immunodeficiency associated with birdshot-like chorioretinopathy. *Ann Allergy Asthma Immunol* 2014;112:472-474.
33. Rao LJ, Coney JM, Schartman JP, Singerman, LJ. Neovascular AMD: treatment beyond anti-VEGF. *Retinal Physician* 2014;11:23-28.
34. Lim JJ, Glassman AR, Aiello LP, Chakravarthy U, Flaxel CJ, Spaide RF; Macula Society CSC Collaborative Study Group, Research and Education Committee and Website Committee. Collaborative retrospective Macula Society study of photodynamic therapy for chronic central serous chorioretinopathy. *Ophthalmology* 2014;121:1073-1078.
35. Maguire MG, Daniel E, Shah AR, Grunwald JE, et al; Comparison of Age-Related Macular Degeneration Treatments Trials (CATT Research Group). Incidence of choroidal neovascularization in the fellow eye in the comparison of age-related macular degeneration treatments trials. *Ophthalmology* 2013;120:2035-2041.
36. Niskopoulou M, Balaskas K, Leung I, Sallo FB, Clemons TE, Bird AC, Peto T; MacTel Study group. Is indocyanine green angiography useful for the diagnosis of macular telangiectasia type 2? *Br J Ophthalmol* 2013;97:946-948.
37. Jaffe GJ, Martin DF, Toth CA, et al; Comparison of Age-related Macular Degeneration Treatments Trials Research Group. Macular morphology and visual acuity in the comparison of age-related macular degeneration treatments trials. *Ophthalmology* 2013;120:1860-1870.

38. Busbee BG, Ho AC, Brown DM, et al; HARBOR Study Group. Twelve-month efficacy and safety of 0.5 mg or 2.0 mg ranibizumab in patients with subfoveal neovascular age-related macular degeneration. *Ophthalmology* 2013;120:1046-1056.
39. Hagstrom SA, Ying GS, Pauer GJ, et al; Comparison of AMD Treatments Trials Research Group. Pharmacogenetics for genes associated with age-related macular degeneration in the Comparison of AMD Treatments Trials (CATT). *Ophthalmology* 2013;120:593-599.
40. Ying GS, Huang J, Maguire MG, et al; Comparison of Age-related Macular Degeneration Treatments Trials Research Group. Baseline predictors for one-year visual outcomes with ranibizumab or bevacizumab for neovascular age-related macular degeneration. *Ophthalmology* 2013 Jan;120:122-129.
41. Verhoeven VJ, Hysi PG, Wojciechowski R, et al; Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Research Group. Genome-wide meta-analyses of multiancestry cohorts identify multiple new susceptibility loci for refractive error and myopia. *Nat Genet* 2013;45:314-318.
42. Danis RP, Domalpally A, Chew EY, et al; AREDS2 Study Group. Methods and reproducibility of grading optimized digital color fundus photographs in the Age-Related Eye Disease Study 2 (AREDS2 Report Number 2). *Invest Ophthalmol Vis Sci* 2013;54:4548-4554.
43. Bressler SB, Qin H, Melia M, et al; Diabetic Retinopathy Clinical Research Network. Exploratory analysis of the effect of intravitreal ranibizumab or triamcinolone on worsening of diabetic retinopathy in a randomized clinical trial. *JAMA Ophthalmol* 2013;131:1033-1040.
44. Orchard TJ, Lyons TJ, Cleary PA, et al; DCCT/EDIC Research Group. The association of skin intrinsic fluorescence with type 1 diabetes complications in the DCCT/EDIC study. *Diabetes Care* 2013;36:3146-3153.
45. Jacobson AM, Braffett BH, Cleary PA, Gubitosi-Klug RA, Larkin ME; DCCT/EDIC Research Group. The long-term effects of type 1 diabetes treatment and complications on health-related quality of life: a 23-year follow-up of the Diabetes Control and Complications/Epidemiology of Diabetes Interventions and Complications cohort. *Diabetes Care* 2013;36:3131-3138.
46. Lopes-Virella MF, Baker NL, Hunt KJ, Cleary PA, Klein R, Virella G; DCCT/EDIC Research Group. Baseline markers of inflammation are associated with progression to macroalbuminuria in type 1 diabetic subjects. *Diabetes Care* 2013;36:2317-2323.
47. Cheng CY, Schache M, Ikram MK, et al; Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions, and Complications Research Group. Nine loci for ocular axial length identified through genome-wide association studies, including shared loci with refractive error. *Am J Hum Genet* 2013;93:264-277.

48. Nathan DM, Bayless M, Cleary P, et al; DCCT/EDIC Research Group. Diabetes control and complications trial/epidemiology of diabetes interventions and complications study at 30 years: advances and contributions. *Diabetes* 2013;62:3976-3986.
49. Niskopoulou M, Balaskas K, Leung I, Sallo FB, Clemons TE, Bird AC, Peto T; MacTel Study group. Is indocyanine green angiography useful for the diagnosis of macular telangiectasia type 2? *Br J Ophthalmol* 2013;97:946-948.
50. Sheetz MJ, Aiello LP, Davis MD, et al; MBDL and MBCU Study Groups. The effect of the oral PKC  $\beta$  inhibitor ruboxistaurin on vision loss in two phase 3 studies. *Invest Ophthalmol Vis Sci* 2013;54:1750-1757.
51. Verhoeven VJ, Hysi PG, Wojciechowski R, Fan Q, et al; Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Research Group. Genome-wide meta-analyses of multiancestry cohorts identify multiple new susceptibility loci for refractive error and myopia. *Nat Genet* 2013;45:314-318.
52. Mata NL, Lichter JB, Vogel R, Han Y, Bui TV, Singerman LJ. Investigation of oral fenretinide for treatment of geographic atrophy in age-related macular degeneration. *Retina* 2013;33:498-507.
53. Clemons TE, Gillies MC, Chew EY, et al; Macular Telangiectasia Project Research Group. Medical characteristics of patients with macular telangiectasia Type 2 (MacTel Type 2) MacTel Project Report No. 3. *Ophthalmic Epidemiology* 2013; 20:109-113.
54. Sallo FB, Peto T, Egan C, et al; MacTel Study Group. The IS/OS junction layer in the natural history of type 2 idiopathic macular telangiectasia. *Invest Ophthalmol Vis Sci* 2012;53:7889-7895.
55. Sallo FB, Peto T, Egan C, et al; MacTel Study Group. "En face" OCT imaging of the IS/OS junction line in type 2 idiopathic macular telangiectasia. *Invest Ophthalmol Vis Sci* 2012;53:6145-6152.
56. Diabetic Retinopathy Clinical Research Network, Elman MJ, Qin H, Aiello LP, et al. Intravitreal ranibizumab for diabetic macular edema with prompt versus deferred laser treatment: three-year randomized trial results. *Ophthalmology* 2012;119:2312-2318.
57. Comparison of Age-related Macular Degeneration Treatments Trials (CATT) Research Group, Martin DF, Maguire MG, Fine SL, et al. Ranibizumab and bevacizumab for treatment of neovascular age-related macular degeneration: two-year results. *Ophthalmology* 2012;119:1388-1398.
58. Lopes-Virella MF, Baker NL, Hunt KJ, Lyons TJ, Jenkins AJ, Virella G; DCCT/EDIC Study Group. High concentrations of AGE-LDL and oxidized LDL in circulating immune complexes are associated with progression of retinopathy in type 1 diabetes. *Diabetes Care* 2012;35:1333-1340.



59. Mauschitz MM, Fonseca S, Chang P, Göbel AP, Fleckenstein M, Jaffe GJ, Holz FG, Schmitz-Valckenberg S; GAP Study Group. Topography of geographic atrophy in age-related macular degeneration. *Invest Ophthalmol Vis Sci* 2012;53:4932-4939.
60. Do DV, Gower EW, Cassard SD, Boyer D, Bressler NM, Bressler SB, Heier JS, Jefferys JL, Singerman LJ, Solomon SD. Detection of new-onset choroidal neovascularization using optical coherence tomography: the AMD DOC Study. *Ophthalmology* 2012;119:771-778.
61. Singerman LJ. Tribute to a good friend. *Retina* 2012;32 Suppl 1:S15-16.
62. Haller JA, Bandello F, Belfort R Jr, et al; Ozurdex GENEVA Study Group, Li J. Dexamethasone intravitreal implant in patients with macular edema related to branch or central retinal vein occlusion twelve-month study results. *Ophthalmology* 2011;118:2453-2460.
63. DCCT/EDIC Research Group, de Boer IH, Sun W, Cleary PA, Lachin JM, Molitch ME, Steffes MW, Zinman B. Intensive diabetes therapy and glomerular filtration rate in type 1 diabetes. *N Engl J Med* 2011;365:2366-2376.
64. Sallo FB, Leung I, Chung M, Wolf-Schnurrbusch UE, Dubra A, Williams DR, Clemons T, Pauleikhoff D, Bird AC, Peto T; MacTel Study Group. Retinal crystals in type 2 idiopathic macular telangiectasia. *Ophthalmology* 2011;118:2461-2467.
65. Aiello LP, Vignati L, Sheetz MJ, Zhi X, Girach A, Davis MD, Wolka AM, Shahri N, Milton RC; PKC-DRS and PKC-DRS2 Study Groups. Oral protein kinase c  $\beta$  inhibition using ruboxistaurin: efficacy, safety, and causes of vision loss among 813 patients (1,392 eyes) with diabetic retinopathy in the Protein Kinase C  $\beta$  Inhibitor-Diabetic Retinopathy Study and the Protein Kinase C  $\beta$  Inhibitor-Diabetic Retinopathy Study 2. *Retina* 2011; 31:2084-2094.
66. Gangaputra S, Almkhatar T, Glassman AR, Aiello LP, Bressler N, Bressler SB, Danis RP, Davis MD; Diabetic Retinopathy Clinical Research Network. Comparison of film and digital fundus photographs in eyes of individuals with diabetes mellitus. *Invest Ophthalmol Vis Sci* 2011;52:6168-6173.
67. Chan CK, Ip MS, Vanveldhuisen PC, Oden NL, Scott IU, Tolentino MJ, Blodi BA; SCORE Study Investigator Group. SCORE Study Report #11. Incidences of neovascular events in eyes with retinal vein occlusion. *Ophthalmology* 2011;118:1364-1372.
68. Schmitz-Valckenberg S, Alten F, Steinberg JS, Jaffe GJ, Fleckenstein M, Mukesh BN, Hohman TC, Holz FG; Geographic Atrophy Progression (GAP) Study Group. Reticular drusen associated with geographic atrophy in age-related macular degeneration. *Invest Ophthalmol Vis Sci* 2011;52:5009-5015.
69. CATT Research Group, Martin DF, Maguire MG, Ying GS, Grunwald JE, Fine SL, Jaffe GJ. Ranibizumab and bevacizumab for neovascular age-related macular degeneration. *N Engl J Med* 2011 May 19;364:1897-1908. Epub 2011 Apr 28.

70. Sheetz MJ, Aiello LP, Shahri N, Davis MD, Kles KA, Danis RP; MBDV Study Group. Effect of ruboxistaurin (RBX) On visual acuity decline over a 6-year period with cessation and reinstatement of therapy: results of an open-label extension of the Protein Kinase C Diabetic Retinopathy Study 2 (PKC-DRS2). *Retina* 2011;31:1053-1059.
71. Coney JM, Schartman JP, Singerman LJ. Advancing treatments for diabetic macular edema. *Retinal Physician* 2011;8:40, 43-44, 46.
72. Diabetic Retinopathy Clinical Research Network; Writing Committee, Elman MJ, Bressler NM, Qin H, Beck RW, Ferris FL 3rd, Friedman SM, Glassman AR, Scott IU, Stockdale CR, Sun JK. Expanded 2-year follow-up of ranibizumab plus prompt or deferred laser or triamcinolone plus prompt laser for diabetic macular edema. *Ophthalmology* 2011;118:609-614.
73. de Boer IH, Rue TC, Cleary PA, Lachin JM, Molitch ME, Steffes MW, Sun W, Zinman B, Brunzell JD; Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications Study Research Group, White NH, Danis RP, Davis MD, Hainsworth D, Hubbard LD, Nathan DM. Long-term renal outcomes of patients with type 1 diabetes mellitus and microalbuminuria: an analysis of the Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications cohort. *Arch Intern Med* 2011;171:412-420.
74. Danis RP, Scott IU, Qin H, Altaweel MM, Bressler NM, Bressler SB, Browning DJ, Kollman C; For The Diabetic Retinopathy Clinical Research Network. Association of fluorescein angiographic features with visual acuity and with optical coherence tomographic and stereoscopic color fundus photographic features of diabetic macular edema in a randomized clinical trial. *Retina* 2010;30:1627-1637.
75. Flaxel CJ, Edwards AR, Aiello LP, Arrigg PG, Beck RW, Bressler NM, Bressler SB, Ferris FL 3rd, Gupta SK, Haller JA, Lazarus HS, Qin H. Factors associated with visual acuity outcomes after vitrectomy for diabetic macular edema: Diabetic Retinopathy Clinical Research Network. *Retina* 2010;30:1488-1495.
76. Ferris FL 3rd, Miller KM, Glassman AR, Beck RW; Diabetic Retinopathy Clinical Research Network. A proposed method of logarithmic transformation of optical coherence tomography data for use in clinical research. *Ophthalmology* 2010;117:1512-1516.
77. Haller JA, Bandello F, Belfort R Jr, Blumenkranz MS, Gillies M, Heier J, Loewenstein A, Yoon YH, Jacques ML, Jiao J, Li XY, Whitcup SM; OZURDEX GENEVA Study Group. Randomized, sham-controlled trial of dexamethasone intravitreal implant in patients with macular edema due to retinal vein occlusion. *Ophthalmology* 2010;117:1134-1146.
78. Diabetic Retinopathy Clinical Research Network Writing Committee on behalf of the DRCR.net. Vitrectomy outcomes in eyes with diabetic macular edema and vitreomacular traction. *Ophthalmology* 2010;117:1087-1093.

79. Diabetic Retinopathy Clinical Research Network. Randomized trial evaluating ranibizumab plus prompt or deferred laser or triamcinolone plus prompt laser for diabetic macular edema. *Ophthalmology*. 2010;117:1064-1070.
80. Aiello LP, Edwards AR, Beck RW, Bressler NM, Davis MD, Ferris F, Glassman AR, Ip MS, Miller KM; Diabetic Retinopathy Clinical Research Network. Factors associated with improvement and worsening of visual acuity 2 years after focal/grid photocoagulation for diabetic macular edema. *Ophthalmology* 2010;117:946-953.
81. Bressler NM, Chang TS, Suñer IJ, Fine JT, Dolan CM, Ward J, Ianchulev T; MARINA and ANCHOR Research Groups. Vision-related function after ranibizumab treatment by better- or worse-seeing eye: clinical trial results from MARINA and ANCHOR. *Ophthalmology* 2010;117:747-756.e4
82. Chen W, Stambolian D, Edwards AO, Branham KE, et al; Complications of Age-Related Macular Degeneration Prevention Trial Research Group. Genetic variants near TIMP3 and high-density lipoprotein-associated loci influence susceptibility to age-related macular degeneration. *Proc Natl Acad Sci U S A* 2010 Apr 20;107:7401-7406.
83. Cordell WH, Maturi RK, Costigan TM, Marmor MF, Weleber RG, Coupland SG, Danis RP, McGettigan JW Jr, Antoszyk AN, Klise S, Sides GD; ERG Testing During Chronic PDE5 Inhibitor Administration (ERG-PDE5i) Consortium. Retinal effects of 6 months of daily use of tadalafil or sildenafil. *Arch Ophthalmol* 2009;127:367-373.
84. Diabetes Control and Complications Trial/Epidemiology of Diabetes Interventions and Complications (DCCT/EDIC) Research Group, Nathan DM, Zinman B, Cleary PA, Backlund JY, Genuth S, Miller R, Orchard TJ. Modern-day clinical course of type 1 diabetes mellitus after 30 years' duration: the diabetes control and complications trial/epidemiology of diabetes interventions and complications and Pittsburgh epidemiology of diabetes complications experience (1983-2005). *Arch Intern Med* 2009;169:1307-1316.
85. Clemons TE, Gillies MC, Chew EY, Bird AC, Peto T, Figueroa MJ, Harrington MW; MacTel Research Group. Baseline characteristics of participants in the natural history study of macular telangiectasia (MacTel) MacTel Project Report No. 2. *Ophthalmic Epidemiol* 2010;17:66-73.
86. Williams GA, Haller JA, Kuppermann BD, Blumenkranz MS, Weinberg DV, Chou C, Whitcup SM; Dexamethasone DDS Phase II Study Group. Dexamethasone posterior-segment drug delivery system in the treatment of macular edema resulting from uveitis or Irvine-Gass syndrome. *Am J Ophthalmol* 2009;147:1048-1054.
87. Kuppermann BD, Chou C, Weinberg DV, Whitcup SM, Haller JA, Blumenkranz MS; Dexamethasone DDS Phase II Study Group. Intravitreal dexamethasone effects on different patterns of diabetic macular edema. *Arch Ophthalmol* 2010;128:642-643.

88. Haller JA, Kuppermann BD, Blumenkranz MS, Williams GA, Weinberg DV, Chou C, Whitcup SM; Dexamethasone DDS Phase II Study Group. Randomized controlled trial of an intravitreal dexamethasone drug delivery system in patients with diabetic macular edema. *Arch Ophthalmol* 2010;128:289-296.
89. Ying GS, Maguire MG, Alexander J, Martin RW, Antoszyk AN; Complications of Age-related Macular Degeneration Prevention Trial Research Group. Description of the Age-Related Eye Disease Study 9-step severity scale applied to participants in the Complications of Age-related Macular Degeneration Prevention Trial. *Arch Ophthalmol* 2009;127:1147-1151.
90. Cukras C, Agrón E, Klein ML, Ferris FL 3rd, Chew EY, Gensler G, Wong WT; Age-Related Eye Disease Study Research Group. Natural history of drusenoid pigment epithelial detachment in age-related macular degeneration: Age-Related Eye Disease Study Report No. 28. *Ophthalmology* 2010;117:489-499.
91. Forooghian F, Agrón E, Clemons TE, Ferris FL 3rd, Chew EY; Age-Related Eye Disease Study Research Group. Visual acuity outcomes after cataract surgery in patients with age-related macular degeneration: age-related eye disease study report no. 27. *Ophthalmology* 2009;116:2093-2100.
92. Bhavsar AR, Googe JM Jr, Stockdale CR, Bressler NM, Brucker AJ, Elman MJ, Glassman AR; Diabetic Retinopathy Clinical Research Network. Risk of endophthalmitis after intravitreal drug injection when topical antibiotics are not required: the diabetic retinopathy clinical research network laser-ranibizumab-triamcinolone clinical trials. *Arch Ophthalmol* 2009;127:1581-1583.
93. Bressler NM, Edwards AR, Beck RW, Flaxel CJ, Glassman AR, Ip MS, Kollman C, Kuppermann BD, Stone TW; Diabetic Retinopathy Clinical Research Network. Exploratory analysis of diabetic retinopathy progression through 3 years in a randomized clinical trial that compares intravitreal triamcinolone acetate with focal/grid photocoagulation. *Arch Ophthalmol* 2009;127:1566-1571.
94. Scott IU, Oden NL, VanVeldhuisen PC, Ip MS, Blodi BA, Antoszyk AN; SCORE Study Investigator Group. SCORE Study Report 7: incidence of intravitreal silicone oil droplets associated with staked-on vs. luer cone syringe design. *Am J Ophthalmol* 2009;148:725-732.
95. The SCORE Study Research Group (L Singerman, writing committee). A randomized trial comparing the efficacy and safety of intravitreal triamcinolone with standard care to treat vision loss associated with macular edema secondary to branch retinal vein occlusion: the Standard Care vs. Corticosteroid for Retinal Vein Occlusion (SCORE) study report 6. *Arch Ophthalmol* 2009;127:1115-1128.
96. The SCORE Study Research Group (L Singerman, writing committee). A randomized trial comparing the efficacy and safety of intravitreal triamcinolone with observation to treat

- vision loss associated with macular edema secondary to central retinal vein occlusion: the Standard Care vs. Corticosteroid for Retinal Vein Occlusion (SCORE) study report 5. *Arch Ophthalmol* 2009;127:1101-1114.
97. Ip MS, Oden NL, Scott IU, VanVeldhuisen PC, Blodi BA, Figueroa M, Antoszyk A, Elman M and the SCORE Study Investigator Group. SCORE Study Report 3: Study design and baseline characteristics. *Ophthalmology* 2009;116:1770–1777.
  98. Singerman L. Combination therapy using the small interfering RNA bevasiranib. *Retina* 2009;29(6 Suppl):S49-50.
  99. Diabetic Retinopathy Clinical Research Network. The course of response to focal/grid photocoagulation for diabetic macular edema. *Retina* 2009 Nov-Dec;29:1436-1443.
  100. Scott IU, Danis RP, Bressler SB, Bressler NM, Browning DJ, Qin H; Diabetic Retinopathy Clinical Research Network. Effect of focal/grid photocoagulation on visual acuity and retinal thickening in eyes with non-center-involved diabetic macular edema. *Retina* 2009 May;29:613-617.
  101. Browning DJ, Apte RS, Bressler SB, Chalam KV, Danis RP, Davis MD, Kollman C, Qin H, Sadda S, Scott IU; Diabetic Retinopathy Clinical Research Network. Association of the extent of diabetic macular edema as assessed by optical coherence tomography with visual acuity and retinal outcome variables. *Retina* 2009 Mar;29:300-305.
  102. Diabetic Retinopathy Clinical Research Network (DRCR.net), Beck RW, Edwards AR, Aiello LP, Bressler NM, Ferris F, Glassman AR, Hartnett E, Ip MS, Kim JE, Kollman C. Three-year follow up of a randomized trial comparing focal/grid photocoagulation and intravitreal triamcinolone for diabetic macular edema. *Arch Ophthalmol* 2009;127:245-251.
  103. Diabetic Retinopathy Clinical Research Network, Brucker AJ, Qin H, Antoszyk AN, Beck RW, Bressler NM, Browning DJ, Elman MJ, Glassman AR, Gross JG, Kollman C, Wells JA 3rd. Observational study of the development of diabetic macular edema following panretinal (scatter) photocoagulation given in 1 or 4 sittings. *Arch Ophthalmol* 2009;127:132-140.
  104. Sun JK, Aiello LP, Stockman M, Cavallerano JD, Kopple A, Eagan S, Qin H, Kollman C, Beck RW, Glassman AR; Diabetic Retinopathy Clinical Research Network. Effects of dilation on Electronic-ETDRS Visual Acuity in diabetic patients. *Invest Ophthalmol Vis Sci* 2009;50:1580-1584.
  105. Glassman AR, Beck RW, Browning DJ, Danis RP, Kollman C; Diabetic Retinopathy Clinical Research Network Study Group. Comparison of optical coherence tomography in diabetic macular edema, with and without reading center manual grading from a clinical trials perspective. *Invest Ophthalmol Vis Sci* 2009;50:560-566.

106. Brown DM, Michels M, Kaiser PK, Heier JS, Sy JP, Ianchulev T; ANCHOR Study Group. Ranibizumab versus verteporfin photodynamic therapy for neovascular age-related macular degeneration: Two-year results of the ANCHOR study. *Ophthalmology*. 2009;116:57-65.e5
107. Bressler NM, Chang TS, Fine JT, Dolan CM, Ward J; Anti-VEGF Antibody for the Treatment of Predominantly Classic Choroidal Neovascularization in Age-Related Macular Degeneration (ANCHOR) Research Group. Improved vision-related function after ranibizumab vs. photodynamic therapy: a randomized clinical trial. *Arch Ophthalmol*. 2009;127:13-21.
108. Ravage ZB, Singerman LJ. Endogenous Nocardial chorioretinitis in an immunocompetent patient. *Retinal Cases & Brief Reports* 2009;3:27–30.
109. Patronas M, Coney JM, Singerman LJ. Treating neovascular peripheral retinal diseases. *Retinal Physician* 2008;5(8):53,54,56,58.
110. Clemons TE, Gillies MC, Chew EY, Bird AC, Peto T, Figueroa M, Harrington MW; Macular Telangiectasia Research Group. The National Eye Institute Visual Function Questionnaire in the Macular Telangiectasia (MacTel) Project. *Invest Ophthalmol Vis Sci* 2008;49:4340-4346.
111. Bressler NM, Edwards AR, Antoszyk AN, Beck RW, Browning DJ, Ciardella AP, Danis RP, Elman MJ, Friedman SM, Glassman AR, Gross JG, Li HK, Murtha TJ, Stone TW, Sun JK; Diabetic Retinopathy Clinical Research Network. Retinal thickness on Stratus optical coherence tomography in people with diabetes and minimal or no diabetic retinopathy. *Am J Ophthalmol* 2008;145:894-901
112. Browning DJ, Altaweel MM, Bressler NM, Bressler SB, Scott IU; Diabetic Retinopathy Clinical Research Network. Diabetic macular edema: what is focal and what is diffuse? *Am J Ophthalmol* 2008;146:649-655.e1-6
113. Ying G-S, Maguire M, Liu C, Antoszyk A, Complications of Age-related Macular Degeneration Prevention Trial Research Group. Night vision symptoms and progression of age-related macular degeneration (AMD) in the Complications of AMD Prevention Trial. *Ophthalmology*. Epub 2008 Jul 30.
114. Davis MD, Bressler SB, Aiello LP, Bressler NM, Browning DJ, Flaxel CJ, Fong DS, Foster WJ, Glassman AR, Hartnett MER, Kollman C, Li HK, Qin Q, Scott IU; the Diabetic Retinopathy Clinical Research Network Study Group. Comparison of time-domain OCT and fundus photographic assessments of retinal thickening in eyes with diabetic macular edema. *Invest Ophthalmol Vis Sci* 2008;49:1745-1752.
115. Ip MS, Bressler SB, Antoszyk AN, Flaxel CJ, Kim JE, Friedman SM, Qin H, Jaeb Center for Health Research; the Diabetic Retinopathy Clinical Research Network. A randomized trial comparing intravitreal triamcinolone and laser photocoagulation for diabetic macular edema: baseline features. *Retina* 2008;.28:919-930.

116. Complications of Age-related Macular Degeneration Prevention Trial (CAPT) Research Group. Risk factors for choroidal neovascularization and geographic atrophy in the complications of age-related macular degeneration prevention trial. *Ophthalmology* 2008;115:1474-1479, 1479.e1-6. Epub 2008 May 27.
117. Maguire MG, Alexander J, Fine SL; Complications of Age-related Macular Degeneration Prevention Trial (CAPT) Research Group. Characteristics of choroidal neovascularization in the complications of age-related macular degeneration prevention trial. *Ophthalmology* 2008;115:1468-1473, 1473.e1-2. Epub 2008 May 16.
118. Singerman LJ, Masonson H, Patel M, Adamis AP, Buggage R, Cunningham E, Goldbaum M, Katz B, Guyer D. Pegaptanib sodium for neovascular age-related macular degeneration: third-year safety results of the V.I.S.I.O.N. trial. *Br J Ophthalmol* 2008 Jul 9. [Epub ahead of print]
119. Diabetic Retinopathy Clinical Research Network. A randomized trial comparing intravitreal triamcinolone acetonide and focal/grid photocoagulation for diabetic macular edema. *Ophthalmology* 2008;115:1447-1449, 1449.e1-10. Epub 2008 Jul 26.
120. Browning DJ, Glassman AR, Aiello LP, Bressler NM, Bressler SB, Danis RP, Davis MD, Ferris FL, Huang SS, Kaiser PK, Kollman C, Sadda S, Scott IU, Qin H; Diabetic Retinopathy Clinical Research Network. Optical coherence tomography measurements and analysis methods in optical coherence tomography studies of diabetic macular edema. *Ophthalmology* 2008;115:1366-71, 1371.e1.
121. Hudson HL, Stulting RD, Heier JS, Lane SS, Chang DF, Singerman LJ, Bradford CA, Leonard RE; on behalf of the IMT002 Study Group. Implantable telescope for end-stage age-related macular degeneration: long-term visual acuity and safety outcomes. *Am J Ophthalmol* 2008;146:664-673. [Epub ahead of print 2008 Aug 28]
122. Scott IU, Bressler NM, Bressler SB, Browning DJ, Chan CK, Danis RP, Davis MD, Kollman C, Qin H; Diabetic Retinopathy Clinical Research Network Study Group. Agreement between clinician and reading center gradings of diabetic retinopathy severity level at baseline in a phase 2 study of intravitreal bevacizumab for diabetic macular edema. *Retina* 2008;28:36-40.
123. Submacular Surgery Trials Research Group, Mann AL, Bressler SB, Hawkins BS, Holekamp N, Bressler NM. Comparison of methods to identify incident cataract in eyes of patients with neovascular maculopathy: Submacular Surgery Trials Report No. 18. *Ophthalmology* 2008;115:127-133. Epub 2007 Jun 14.
124. Rosenfeld PJ, Boyer DS, Bressler NM, Fish G, Grizzard WS, Hao Y, Hnik P, Hudson HL, Singerman L, Slakter JS; VALIO Study Group. Verteporfin therapy of subfoveal occult choroidal neovascularization in AMD using delayed light application: one-year results of the VALIO Study. *Am J Ophthalmol* 2007;144:970-972.

125. Diabetic Retinopathy Clinical Research Network, Scott IU, Edwards AR, Beck RW, Bressler NM, Chan CK, Elman MJ, Friedman SM, Greven CM, Maturi RK, Pieramici DJ, Shami M, Singerman LJ, Stockdale CR. A phase II randomized clinical trial of intravitreal bevacizumab for diabetic macular edema. *Ophthalmology* 2007;114:1860-1867.
126. Macugen AMD Study Group, Apte RS, Modi M, Masonson H, Patel M, Whitfield L, Adamis AP. Pegaptanib 1-year systemic safety results from a safety-pharmacokinetic trial in patients with neovascular age-related macular degeneration. *Ophthalmology* 2007;114:1702-1712.
127. Submacular Surgery Trials Research Group, Solomon SD, Jefferys JL, Hawkins BS, Bressler NM. Incident choroidal neovascularization in fellow eyes of patients with unilateral subfoveal choroidal neovascularization secondary to age-related macular degeneration: SST report No. 20 from the Submacular Surgery Trials Research Group. *Arch Ophthalmol* 2007;125:1323-1330.
128. Diabetic Retinopathy Clinical Research Network. Randomized trial of peribulbar triamcinolone acetonide with and without focal photocoagulation for mild diabetic macular edema: a pilot study. *Ophthalmology* 2007;114:1190-1196.
129. Coney JM, Singerman LJ. Patient management in intravitreal injections. *Retinal Physician* 2007;4:52, 55.
130. Bhavsar AR, Ip MS, Glassman AR; DRCRnet and the SCORE Study Groups. The risk of endophthalmitis following intravitreal triamcinolone injection in the DRCRnet and SCORE clinical trials. *Am J Ophthalmol* 2007;144:454-456.
131. Diabetic Retinopathy Clinical Research Network. Comparison of the modified early treatment diabetic retinopathy study and mild macular grid laser photocoagulation strategies for diabetic macular edema. *Arch Ophthalmol* 2007;125:469-480.
132. PKC-DMES Study Group. Effect of ruboxistaurin in patients with diabetic macular edema: thirty-month results of the randomized PKC-DMES clinical trial. *Arch Ophthalmol* 2007;125:318-324.
133. Kuppermann BD, Blumenkranz MS, Haller JA, Williams GA, Weinberg DV, Chou C, Whitcup SM; Dexamethasone DDS Phase II Study Group. Randomized controlled study of an intravitreal dexamethasone drug delivery system in patients with persistent macular edema. *Arch Ophthalmol* 2007;125:309-317.
134. Diabetic Retinopathy Clinical Research Network. Relationship between optical coherence tomography-measured central retinal thickness and visual acuity in diabetic macular edema. *Ophthalmology* 2007;114:525-536.
135. Russell SR, Hudson HL, Jerdan JA; Anecortave Acetate Clinical Study Group. Anecortave acetate for the treatment of exudative age-related macular degeneration – a review of clinical outcomes. *Surv Ophthalmol* 2007;52 Suppl 1:S79-90.



136. PKC-DRS2 Group, Aiello LP, Davis MD, Girach A, Kles KA, Milton RC, Sheetz MJ, Vignati L, Zhi XE. Effect of ruboxistaurin on visual loss in patients with diabetic retinopathy. *Ophthalmology* 2006;113:2221-2230.
137. Complications of Age-related Macular Degeneration Prevention Trial Research Group. Laser treatment in patients with bilateral large drusen: The Complications of Age-related Macular Degeneration Prevention Trial. *Ophthalmology* 2006;113:1974-1986.
138. VEGF Inhibition Study in Ocular Neovascularization (V.I.S.I.O.N.) Clinical Trial Group, Chakravarthy U, Adamis AP, Cunningham ET Jr, Goldbaum M, Guyer DR, Katz B, Patel M. Year 2 efficacy results of 2 randomized controlled clinical trials of pegaptanib for neovascular age-related macular degeneration. *Ophthalmology*. 2006 Sep;113:1508.e1-25. Epub 2006 Jul 7.
139. Kaiser PK; Treatment of Age-Related Macular Degeneration with Photodynamic Therapy (TAP) Study Group. Verteporfin therapy of subfoveal choroidal neovascularization in age-related macular degeneration: 5-year results of two randomized clinical trials with an open-label extension: TAP report no. 8. *Graefes Arch Clin Exp Ophthalmol* 2006;244:1132-1142
140. Brown DM, Kaiser PK, Michels M, Soubrane G, Heier JS, Kim RY, Sy JP, Schneider S; ANCHOR Study Group. Ranibizumab versus verteporfin for neovascular age-related macular degeneration. *N Engl J Med* 2006;355:1432-1444.
141. Singerman LJ. Macular degeneration: management 25 years ago. *Retina* 2006;26 (6 Suppl):S13-16.
142. Miller DG, Singerman LJ. Vision loss in younger patients: a review of choroidal neovascularization. *Optom Vis Sci* 2006;83:316-325.
143. Grossniklaus HE, Wilson DJ, Bressler SB, Bressler NM, Toth CA, Green WR, Miskala P, for the Submacular Surgery Trials Research Group. Clinicopathologic studies of eyes that were obtained postmortem from four patients who were enrolled in the Submacular Surgery Trials: SST report no. 16. *Am J Ophthalmol* 2006;141:93-104.
144. Submacular Surgery Trials Research Group. Comparison of 2D reconstructions of surgically excised subfoveal choroidal neovascularization with fluorescein angiographic features: SST report no. 15. *Ophthalmology* 2006;113:267-279.
145. Gonzales CR; VEGF Inhibition Study in Ocular Neovascularization (V.I.S.I.O.N.) Clinical Trial Group. Enhanced efficacy associated with early treatment of neovascular age-related macular degeneration with pegaptanib sodium: an exploratory analysis. *Retina*. 2005;25:815-27.
146. Singerman LJ (Chairman), Brucker AJ, Jampol LM, Lim JI, Rosenfeld P, Schachat AP, Spaide RF. Neovascular age-related macular degeneration: Roundtable. *Retina* 2005;25:S1-S22.

147. Solomon SD, Bressler SB, Hawkins BS, Marsh MJ, Bressler NM; Submacular Surgery Trials Research Group. Guidelines for interpreting retinal photographs and coding findings in the Submacular Surgery Trials (SST): SST report no. 8. *Retina* 2005;25:253-268.
148. PKC-DRS Study Group. The effect of ruboxistaurin on visual loss in patients with moderately severe to very severe nonproliferative diabetic retinopathy: initial results of the protein kinase C {beta} inhibitor diabetic retinopathy study (PKC-DRS) multicenter randomized clinical trial. *Diabetes* 2005; 54:2188-2197.
149. Submacular Surgery Trials Research Group. Histopathological and ultrasound features of surgically excised subfoveal choroidal neovascular lesions. SST report no. 7. *Arch Ophthalmol* 2005;123:914-921.
150. Cunningham ET Jr, Adamis AP, Altaweel M, Aiello LP, Bressler NM, D'Amico DJ, Goldbaum M, Guyer DR, Katz B, Patel M, Schwartz SD; 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. *Ophthalmology* 2005;112:1747-1757.
151. Submacular Surgery Trials Research Group. Guidelines for interpreting retinal photographs and coding findings in the Submacular Surgery Trials (SST). SST report no. 8. *Retina* 2005;25:253-268.
152. Submacular Surgery Trials Research Group. Health-related quality of life among patients with ocular histoplasmosis or idiopathic choroidal neovascularization at enrollment in a randomized trial of submacular surgery. SST report no. 5. *Arch Ophthalmol* 2005;123:78-88.
153. Childs AL, Submacular Surgery Trials Research Group. Effect of order of administration of health-related quality of life instruments on responses. SST report no. 3. *Qual Life Res* 2005;14:493-500.
154. Orr PR, Marsh MJ, Hawkins BS, Hawse PL, Bressler NM; Submacular Surgery Trials Pilot Study Investigators. Evaluation of the traveling vision examiner program in the Submacular Surgery Trials pilot study. *Ophthalmic Epidemiol* 2005;12:47-57.
155. Gragoudas ES, Adamis AP, Cunningham ET Jr, Feinsod M, Guyer DR; VEGF Inhibition Study in Ocular Neovascularization Clinical Trial Group. Pegaptanib for neovascular age-related macular degeneration. *N Engl J Med* 2004;351:2805-2816.
156. Submacular Surgery Trials Research Group. Patients' perceptions of the value of current vision: assessment of preference values among patients with subfoveal choroidal neovascularization – The Submacular Surgery Trials Vision Preference Value Scale: SST Report No. 6. *Arch Ophthalmol* 2004;122:1856-1867.
157. VIP Report No. 5 Writing Committee. Verteporfin in Photodynamic Therapy: report no. 5. *Ophthalmology* 2004;111:2144.

158. Collaborative Ocular Melanoma Study Group. The Collaborative Ocular Melanoma Study (COMS) randomized trial of pre-enucleation radiation of large choroidal melanoma: IV. Ten-year mortality findings and prognostic factors. COMS report number 24. *Am J Ophthalmol* 2004;138:936-951.
159. Submacular Surgery Trials Research Group. Surgery for predominantly hemorrhagic choroidal neovascular lesions of age-related macular degeneration: Quality-of-life findings. SST report no. 14. *Ophthalmology* 2004;111:2007-2014.
160. Submacular Surgery Trials Research Group. Surgery for predominantly hemorrhagic choroidal neovascular lesions of age-related macular degeneration: Ophthalmic findings. SST report no. 13. *Ophthalmology* 2004;111:1993-2006.
161. Submacular Surgery Trials Research Group. Surgery for subfoveal choroidal neovascularization in age-related macular degeneration: Quality-of-life findings. SST report no. 12. *Ophthalmology* 2004;111:1981-1992.
162. Submacular Surgery Trials Research Group. Surgery for subfoveal choroidal neovascularization in age-related macular degeneration: Ophthalmic findings. SST report no. 11. *Ophthalmology* 2004;111:1967-1980.
163. VAM Study Writing Committee (Bhavsar A, Bressler NM, Burdan A, Costello CV, Haynes LA, Ho AC, Koester J, Lim JI, Reaves A, Rosenfeld PJ, Singerman LJ, Slakter JS). Verteporfin therapy in age-related macular degeneration (VAM): an open-label multicenter photodynamic therapy study of 4,435 patients. *Retina* 2004;24:512-520.
164. Submacular Surgery Trials Research Group(L. Singerman a Principal Investigator). Surgical removal versus observation for subfoveal choroidal neovascularization, either associated with the ocular histoplasmosis syndrome or idiopathic: II. Quality-of-life findings from a randomized clinical trial. SST Group H Trial. SST report no. 10. *Arch Ophthalmol* 2004;122:1616-1628.
165. Submacular Surgery Trials Research Group. Surgical removal versus observation for subfoveal choroidal neovascularization, either associated with the ocular histoplasmosis syndrome or idiopathic: I. Ophthalmic findings from a randomized clinical trial: SST Group H Trial. SST Report No. 9. *Arch Ophthalmol* 2004;122:1597-1611.
166. Singerman LJ, Hornik JH. Pegaptanib sodium therapy for exudative age-related macular degeneration. *Retinal Physician* 2004.  
<http://www.retinalphysician.com/article.aspx?article=100006>. Accessed 19 January 2005.
167. Maguire M; Complications of Age-related Macular Degeneration Prevention Trial Research Group . Baseline characteristics, the 25-Item National Eye Institute Visual Functioning Questionnaire, and their associations in the Complications of Age-Related Macular Degeneration Prevention Trial (CAPT). *Ophthalmology* 2004;111:1307-1316.

168. Collaborative Ocular Melanoma Study Group. Ten-year follow-up of fellow eyes of patients enrolled in Collaborative Ocular Melanoma Study (COMS) randomized trials. COMS Report No. 22. *Ophthalmology* 2004;111:966-976.
169. Sadda SR, Pieramici DJ, Marsh MJ, Bressler NM, Bressler SB; Submacular Surgery Trials Pilot Study Investigators. Changes in lesion size after submacular surgery for subfoveal choroidal neovascularization in the submacular surgery trials pilot study. *Retina*. 2004;24:888-899.
170. Submacular Surgery Trials Research Group. Clinical trial performance of community-based compared with university-based practices: Lessons from the Submacular Surgery Trials. SST report no. 2. *Arch Ophthalmol* 2004;122:857-863.
171. Sharma M, Singerman LJ. Reaffirming the gold standard. *Measuring Outcomes in your AMD Patients, Retinal Physician Continuing Medical Education Supplement* 2004;3-5. <http://www.retinalphysician.com/article.aspx?article=100015>. Accessed 1 February 2005.
172. Mobley RY, Moy CS, Reynolds SM, Diener-West M, Newhouse MM, Kerman JS, Hawkins BS; Collaborative Ocular Melanoma Study Group. Time trends in personnel certification and turnover in the Collaborative Ocular Melanoma Study. *Clin Trials* 2004;1:377-386.
173. Bressler SB, Pieramici DJ, Koester JM, Bressler NM for the TAP Study Group. Natural history of minimally classic subfoveal choroidal neovascular lesions in the treatment of age-related macular degeneration with photodynamic therapy (TAP) investigation: outcomes potentially relevant to management – TAP report No. 6. *Arch Ophthalmol* 2004;122:325-329.
174. Submacular Surgery Trials Research Group. Health- and vision-related quality of life among patients with choroidal neovascularization secondary to age-related macular degeneration at time of enrollment in randomized trials of submacular surgery. SST report no. 4. *Am J Ophthalmol* 2004;138:91-108.
175. Complications of Age-related Macular Degeneration Prevention Trial Study Group. The Complications of Age-related Macular Degeneration Prevention Trial (CAPT): rationale, design, and methodology. *Clinical Trials* 2004;1:91-107.
176. Azab M, Benchaboune M, Blinder KJ, et al; Treatment of Age-Related Macular Degeneration with Photodynamic Therapy (TAP) Study Group; Verteporfin in Photodynamic Therapy (VIP) Study Group. Verteporfin therapy of subfoveal choroidal neovascularization in age-related macular degeneration: meta-analysis of 2-year safety results in three randomized clinical trials: Treatment Of Age-Related Macular Degeneration With Photodynamic Therapy and Verteporfin In Photodynamic Therapy Study Report no. 4. *Retina* 2004;24:1-12.
177. D'Amico DJ, Goldberg MF, Hudson H, Jerdan JA, Krueger DS, Luna SP, Robertson SM, Russell S, Singerman L, Slakter JS, Yannuzzi L, Zilliox P; Anecortave Acetate Clinical

- Study Group. Anecortave acetate as monotherapy for treatment of subfoveal neovascularization in age-related macular degeneration: twelve-month clinical outcomes. *Ophthalmology* 2003;110:2372-2383.
178. Singerman LJ, Miller DG. Pharmacological treatments for AMD. *Rev Ophthalmol* 2003;10:88-90, 92, 94. [http://www.revophth.com/index.asp?page=1\\_422.htm](http://www.revophth.com/index.asp?page=1_422.htm)
179. Collaborative Ocular Melanoma Study Group. Comparison of clinical, echographic, and histopathological measurements from eyes with medium-sized choroidal melanoma in the collaborative ocular melanoma study: COMS Report No. 21. *Arch Ophthalmol* 2003;121:1163-1171.
180. Collaborative Ocular Melanoma Study Group. Trends in size and treatment of recently diagnosed choroidal melanoma, 1987-1997: findings from patients examined at collaborative ocular melanoma study (COMS) centers: COMS Report No. 20. *Arch Ophthalmol* 2003;121:1156-1162.
181. Melia M, Moy CS, Reynolds SM, Cella D, Murray TG, Hovland KR, Hayman JA, Mangione CM, The Collaborative Ocular Melanoma Study-Quality Of Life Study Group. Development and validation of disease-specific measures for choroidal melanoma: COMS-QOLS report No. 2. *Arch Ophthalmol* 2003;121:1010-1020.
182. Straatsma BR, Diener-West M, Caldwell R, Engstrom RE; Collaborative Ocular Melanoma Study Group. Mortality after deferral of treatment or no treatment for choroidal melanoma. *Am J Ophthalmol* 2003;136:47-54.
183. Prenner JL, Rosenblatt BJ, Tolentino MJ, Ying GS, Javornik NB, Maguire MG, Ho AC, the CNVPT Research Group. Risk factors for choroidal neovascularization and vision loss in the fellow eye study of CNVPT. *Retina* 2003;23:307-314.
184. The Eyetech Study Group. Anti-vascular endothelial growth factor therapy for subfoveal choroidal neovascularization secondary to age-related macular degeneration. Phase II study results. *Ophthalmology* 2003;110:979-986.
185. Choroidal Neovascularization Prevention Trial Research Group. Laser treatment in fellow eyes with large drusen: updated findings from a pilot randomized clinical trial. *Ophthalmology* 2003;110:971-978.
186. Blinder KJ, Blumenkranz MS, Bressler NM, Bressler SB, Donato G, Lewis H, Lim JJ, Menchini U, Miller JW, Mones JM, Potter MJ, Pournaras C, Reaves A, Rosenfeld P, Schachat AP, Schmidt-Erfurth U, Sickenberg M, Singerman LJ, Slakter JS, Strong HA, Virgili G, Williams GA; Verteporfin In Photodynamic Therapy Study Group. Verteporfin therapy of subfoveal choroidal neovascularization in pathologic myopia: 2-year results of a randomized clinical trial – VIP Report No. 3. *Ophthalmology* 2003;110:667-673.
187. The Submacular Surgery Trials Research Group. Responsiveness of the National Eye Institute Visual Function Questionnaire to changes in visual acuity: findings in patients

- with subfoveal choroidal neovascularization – SST Report No. 1. *Arch Ophthalmol* 2003;121:531-539.
188. Anand R, Bressler NM, Bressler SB, Gray TE, Harvey P, Haynes L, Koester JM, Manos KS, Miller JW, Murphy S, Reaves A, Sickenberg M, Singerman LJ, Strong A, Stur M; "Improvement After Verteporfin Therapy" Writing Committee for TAP Study Group. Improvement after verteporfin therapy. *Arch Ophthalmol* 2003;121:415-416.
189. D'Amico DJ, Goldberg MF, Hudson H, Jerdan JA, Krueger S, Luna S, Robertson SM, Russell S, Singerman L, Slakter JS, Sullivan EK, Yannuzzi L, Zilliox P; The Anecortave Acetate Clinical Study Group. Anecortave acetate as monotherapy for the treatment of subfoveal lesions in patients with exudative age-related macular degeneration (AMD): interim (month 6) analysis of clinical safety and efficacy. *Retina* 2003;23:14-23.
190. The Collaborative Ocular Melanoma Study Group. The COMS Randomized Trial of Iodine 125 Brachytherapy for Choroidal Melanoma. Local treatment failure and enucleation in the first 5 years after brachytherapy. COMS Report No. 19. *Ophthalmology* 2002;198:2197-2206.
191. Singerman LJ, Miller DG. Diabetic retinopathy and DME drug trials advance. *Rev Ophthalmol* 10:124-127, 2002; [http://www.revophth.com/index.asp?page=1\\_204.htm](http://www.revophth.com/index.asp?page=1_204.htm). Accessed October 2002.
192. Rubin GS, Bressler NM, Treatment of Age-Related Macular Degeneration with Photodynamic Therapy (TAP) Study Group. Effects of verteporfin therapy on contrast sensitivity: results from the Treatment of Age-related macular degeneration with Photodynamic therapy (TAP) Investigation – TAP Report No. 4. *Retina* 2002;22:536-544.
193. Treatment of Age-related Macular Degeneration with Photodynamic Therapy (TAP) Study Group. Verteporfin therapy of subfoveal choroidal neovascularization in patients with age-related macular degeneration. Additional information regarding baseline lesion composition's impact on vision outcomes – TAP Report No. 3. *Arch Ophthalmol* 2002;120:1443-1454.
194. Blumenkranz MS, Bressler NM, Bressler SB, Donati G, Fish GE, Haynes LA, Lewis H, Miller JW, Mones JM, Potter MJ, Pournaras C, Reaves A, Rosenfeld PJ, Schachat AP, Schmidt-Erfurth U, Sickenburg M, Singerman LJ, Slakter JS, Strong A, Vannier S, Treatment of Age-Related Macular Degeneration with Photodynamic Therapy (TAP) Study Group. Verteporfin therapy for subfoveal choroidal neovascularization in age-related macular degeneration. Three-year results of an open-label extension of 2 randomized clinical trials – TAP report No. 5. *Arch Ophthalmol* 2002;120:1307-1314.
195. Mitra RA, Singerman LJ. Recent advances in the management of age-related macular degeneration. *Optom Vis Sci* 2002;79:218-224.

196. Eyetech Study Group. Preclinical and phase 1A clinical evaluation of an anti-VEGF pegylated aptamer (EYE001) for the treatment of exudative age-related macular degeneration. *Retina* 2002;22:143-152.
197. Verteporfin Roundtable 2000 And 2001 Participants, Treatment of Age-related Macular Degeneration with Photodynamic Therapy (TAP) Study Group Principal Investigators, and Verteporfin in Photodynamic Therapy (VIP) Study Group Principal Investigators Group (L. Singerman: Writing Committee, Roundtable participant, Principal Investigator). Guidelines for using verteporfin (Visudyne<sup>®</sup>) in photodynamic therapy to treat choroidal neovascularization due to age-related macular degeneration and other causes. *Retina* 2002;22:6-18.
198. Miller DG, Singerman LJ. Natural history of choroidal neovascularization in high myopia. *Curr Opin Ophthalmol* 2001;12:222-224.
199. Collaborative Ocular Melanoma Study Group. Collaborative Ocular Melanoma Study (COMS) randomized trial of 1-125 brachytherapy for choroidal melanoma, III. Initial mortality findings. COMS Report No. 18. *Arch Ophthalmol* 2001;119:969-982.
200. Collaborative Ocular Melanoma Study Group. Collaborative Ocular Melanoma Study (COMS) randomized trial of 1-125 brachytherapy for choroidal melanoma. II. Characteristics of patients enrolled and not enrolled. COMS Report No. 17. *Arch Ophthalmol* 2001;119:951-965.
201. Grostern RJ, Slusker Shternfeld I, Bacus SS, Gilchrist K, Zimbric ML, Albert DM; Collaborative Ocular Melanoma Study Group. Absence of type I estrogen receptors in choroidal melanoma: analysis of Collaborative Ocular Melanoma Study (COMS) eyes. *Am J Ophthalmol* 2001;131:788-791.
202. Verteporfin in Photodynamic Therapy (VIP) Study Group (L. Singerman on the Writing Committee and a Principal Investigator). Verteporfin therapy of subfoveal choroidal neovascularization in age-related macular degeneration: two-year results of a randomized clinical trial including lesions with occult with no classic choroidal neovascularization. Verteporfin in Photodynamic Therapy Report 2. *Am J Ophthalmol* 2001;131:541-560.
203. Verteporfin in Photodynamic Therapy (VIP) Study Group (L. Singerman a member of the Writing Committee and a Principal Investigator). Photodynamic therapy of subfoveal choroidal neovascularization in pathologic myopia with verteporfin: One-year results of a randomized clinical trial. VIP report #1. *Ophthalmology* 2001;108:841-852.
204. The Collaborative Ocular Melanoma Study Group. Assessment of metastatic disease status at death in 435 patients with large choroidal melanoma in the Collaborative Ocular Melanoma Study (COMS): COMS Report No. 15. *Arch Ophthalmol* 2001;119:670-676.
205. Collaborative Ocular Melanoma Study Group. Cause-specific mortality coding: Methods in the Collaborative Ocular Melanoma Study. COMS Report No. 14. *Control Clin Trials* 22:248-262, 2001

206. Treatment of Age-Related Macular Degeneration With Photodynamic Therapy (TAP) Study Group (L. Singerman a member of the Writing Committee and a Principal Investigator). Photodynamic therapy of subfoveal choroidal neovascularization in age-related macular degeneration with verteporfin: two-year results of 2 randomized clinical trials. TAP report #2. *Arch Ophthalmol* 2001;119:198-207.
207. The Collaborative Ocular Melanoma Study Group. Collaborative Ocular Melanoma Study (COMS) randomized trial of I-125 brachytherapy for medium choroidal melanoma. I. Visual acuity after 3 years. COMS Report No. 16. *Ophthalmology* 2001;108:348-366.
208. Diabetes Control and Complications Trial Research Group (L. Singerman a Principal Ophthalmologist). Effect of pregnancy on microvascular complications in the Diabetes Control and Complications Trial. *Diabetes Care* 2000;23:1084-1091.
209. Submacular Surgery Trials Pilot Study Investigators. Submacular Surgery Trials randomized pilot trial of laser photocoagulation versus surgery for recurrent choroidal neovascularization secondary to age-related macular degeneration. II. Quality of life outcomes. Submacular Surgery Trials Pilot Study Report Number 2. *Am J Ophthalmol* 2000;130:408-418.
210. Bressler NM, Bressler SB, Hawkins BS, Marsh MJ, Sternberg P Jr, Thomas MA; Submacular Surgery Trials Pilot Study Investigators. Submacular Surgery Trials randomized pilot trial of laser photocoagulation versus surgery for recurrent choroidal neovascularization secondary to age-related macular degeneration. I: Ophthalmic outcomes. Submacular Surgery Trials Pilot Study Report Number 1. *Am J Ophthalmol* 2000;130:387-407.
211. Singerman LJ. Age-related macular degeneration – a survey of the latest advances. *Eyenet Audio*, American Academy of Ophthalmology, April 2000.
212. McDonald MB, Panel Moderator, with Conway MD, Peyman GA, Puliafito CA, Singerman LJ, Slakter JS, EW Dialogue: Wet ARMD therapy in a whole new light. *EyeWorld* 5(1): 28-30, January 2000.
213. Singerman LJ, Mitra RA. Joining clinical trials offers a chance to help profession. *Ophthalmology Times* Jan 15 2000, 25:12-14.
214. Singerman LJ. The impact of Visudyne™ therapy on the management of AMD: phase III TAP results. *Viewpoint* 1999;3:1.
215. Slakter J, the VIP Research Study Group. Photodynamic therapy of subfoveal choroidal neovascularization in pathologic myopia with verteporfin: study design and baseline characteristics in the VIP randomized clinical trial. *Invest Ophthalmol Vis Sci* 1999;40:S401.
216. Mones J, for the VIP Study Group. Photodynamic therapy (PDT) with verteporfin of the subfoveal choroidal neovascularization in age-related macular degeneration: study design



- and baseline characteristics in the VIP randomized clinical trial. *Invest Ophthalmol Vis Sci* 1999;40:S321.
217. Maberley DAL, Yannuzzi LA, Gitter K, Singerman L, Chew E, Freund KB, Noguiera F, Sallas D, Willson R, Tilocco K. Radiation exposure. A new risk factor for idiopathic perifoveal telangiectasis. *Ophthalmology* 1999;106:2248-2253.
  218. Tabandeh H, Flynn HW Jr, Lewis ML, Rosenfeld PJ, Rodriguez F, Rodriguez A, Singerman LJ, Schiffman J. Visual acuity outcomes of untreated choroidal neovascularization in patients with high myopia and age 50 years and over. *Ophthalmology* 1999;106:2063-2067.
  219. Ho AC, Maguire MG, Yoken J, Lee MS, Shin DS, Javornik NB, Fine SL; Choroidal Neovascularization Prevention Trial Research Group. Laser-induced drusen reduction improves visual function at 1 year. *Ophthalmology* 1999;106:1367-1374.
  220. Treatment of Age-related Macular Degeneration with Photodynamic Therapy (TAP) Study Group (L. Singerman on the Writing Committee and a Principal Investigator). Photodynamic therapy of subfoveal choroidal neovascularization in age-related macular degeneration with verteporfin. One-year results of 2 randomized clinical trials—TAP Report 1. *Arch Ophthalmol* 1999;117:1329-1345.
  221. Collaborative Ocular Melanoma Study Group. Echography (ultrasound) procedures for the Collaborative Ocular Melanoma Study. COMS Report No. 12. *J Ophth Nurs Technol* 1999;Part I, 18(4):143-149, Part II, 18(5):219-232
  222. Collaborative Ocular Melanoma Study Group. The Collaborative Ocular Melanoma Study (COMS) randomized trial of pre-enucleation radiation of large choroidal melanoma. III. Local complications and observations following enucleation. COMS Report No. 11. *Am J Ophthalmol* 1998;126:362-372.
  223. Collaborative Ocular Melanoma Study Group. The Collaborative Ocular Melanoma Study (COMS) randomized trial of pre-enucleation radiation of large choroidal melanoma. II. Initial mortality findings. COMS Report No. 10. *Am J Ophthalmol* 1998;125:779-796.
  224. The Collaborative Ocular Melanoma Study Group. The Collaborative Ocular Melanoma Study (COMS) randomized trial of pre-enucleation radiation of large choroidal melanoma. I. Characteristics of patients enrolled and not enrolled. COMS Report No. 9. *Am J Ophthalmol* 1998;125:767-778.
  225. The Collaborative Ocular Melanoma Study Group. Histopathologic characteristics of uveal melanomas in eyes enucleated from the Collaborative Ocular Melanoma Study. COMS Report No. 6. *Am J Ophthalmol* 1998;125:745-766.
  226. Gorin MB, Day R, Costantino JP, Fisher B, Redmond CK, Wickerham L, Gomolin JE, Margolese RG, Mathen MK, Bowman DM, Kaufmann D, Dimitrov NV, Singerman LJ,

- Bornstein R, Wolmark N. Long-term tamoxifen citrate use and potential ocular toxicity. *Am J Ophthalmol* 1998;125:493-501.
227. Bressler NM for the TAP Research Group. Treatment of age-related macular degeneration with photodynamic therapy (TAP) investigation using verteporfin (BPD-MA): baseline characteristics and safety. *Invest Ophthalmol Vis Sci* 1998;39:S242.
228. Choroidal Neovascularization Prevention Trial Research Group. Choroidal neovascularization in the choroidal neovascularization prevention trial. *Ophthalmology* 1998;105:1364-1372.
229. Choroidal Neovascularization Prevention Trial Research Group. Laser treatment in eyes with large drusen. Short-term effects seen in a pilot randomized clinical trial. *Ophthalmology* 1998;105:11-23.
230. The Collaborative Ocular Melanoma Study Group. Factors predictive of growth and treatment of small choroidal melanoma. COMS Report No. 5. *Arch Ophthalmol* 1997;115:1537-1544.
231. Grossniklaus HE, Albert DM, Green WR, Conway BP, Hovland KR for the Collaborative Ocular Melanoma Study Group. Clear cell differentiation in choroidal melanoma. COMS report no. 8. *Arch Ophthalmol* 1997;115:894-898
232. The Collaborative Ocular Melanoma Study Group. Mortality in patients with small choroidal melanoma. COMS Report No. 4. *Arch Ophthalmol* 1997;115:886-893.
233. Pharmacological Therapy for Macular Degeneration Study Group. Interferon alfa-2a is ineffective for patients with choroidal neovascularization secondary to age-related macular degeneration. Results of a prospective randomized placebo-controlled clinical trial. *Arch Ophthalmol* 1997 Jul;115:865-872.
234. Macular Photocoagulation Study Group. Risk factors for choroidal neovascularization in the second eye of patients with juxtafoveal or subfoveal choroidal neovascularization secondary to age-related macular degeneration. *Arch Ophthalmol* 1997;115:741-747.
235. Central Vein Occlusion Study Group. Natural history and clinical management of central retinal vein occlusion. *Arch Ophthalmol* 1997;115:486-91; erratum in *Arch Ophthalmol* 1997;115:1275
236. Singerman LJ. Diagnostic and therapeutic challenges. Schatz H (ed.). *Retina* 1997, 17:444-448.
237. Singerman LJ. Treatment of subretinal neovascularization. *Argus: Ophthalmology World News*, September, 1996;pp 23-26.
238. Wells CG, Bradford RH, Fish GE, Straatsma BR, Hawkins BS for the COMS Group. Choroidal melanomas in American Indians. *Arch Ophthalmol* 1996;114:1017-1018,

239. Macular Photocoagulation Study Group. Five-year follow-up of fellow eyes of individuals with ocular histoplasmosis and unilateral extrafoveal or juxtafoveal choroidal neovascularization. *Arch Ophthalmol* 1996;114:677-688.
240. Oh KT, Oh KT, Singerman LJ. An eyelash in the vitreous cavity without apparent etiology. (Case Report). *Ophthalmic Surg Lasers* 1996;27:243-245.
241. Macular Photocoagulation Study Group. Laser photocoagulation for neovascular lesions nasal to the fovea. Results from clinical trials for lesions secondary to ocular histoplasmosis or idiopathic causes. *Arch Ophthalmol* 1995;113:56-61.
242. Central Vein Occlusion Study Group. A randomized clinical trial of early panretinal photocoagulation for ischemic central vein occlusion: The Central Vein Occlusion Study Group N Report. *Ophthalmology* 1995; 102:1434-1444.
243. Central Vein Occlusion Study Group. Evaluation of grid pattern photocoagulation for macular edema in central vein occlusion: The Central Vein Occlusion Study Group M Report. *Ophthalmology* 1995;102:1425-1433.
244. Zhou L, Rzeszotarski MS, Singerman LJ, Chokreff JM. The detection and quantification of retinopathy using digital angiograms. *IEEE Transactions on Medical Imaging* 1994;13:619-626.
245. Macular Photocoagulation Study Group (L. Singerman a Principal Investigator and a member of the Writing Committee). Laser photocoagulation for neovascular lesions nasal to the fovea. Results from clinical trials for lesions secondary to ocular histoplasmosis or idiopathic causes. *Arch Ophthalmol* 1994;113:56-61.
246. Diabetes Control and Complications Trial Research Group. The effect of intensive diabetes treatment on the progression of diabetic retinopathy in insulin-dependent diabetes mellitus . The Diabetes Control and Complications Trial. *Arch Ophthalmol* 1994;113:36-51.
247. Macular Photocoagulation Study Group. Evaluation of argon green vs. krypton red laser for photocoagulation of subfoveal choroidal neovascularization in the Macular Photocoagulation Study. *Arch Ophthalmol* 1994;112:1176-1184.
248. Parnes RE, Singerman LJ. Diabetic retinopathy. Preserving your patients' sight. *J Fla Med Assoc* 1994;81:236-239.
249. Macular Photocoagulation Study Group. Laser photocoagulation for juxtafoveal choroidal neovascularization. Five-year results from randomized clinical trials. *Arch Ophthalmol* 1994;112:500-509.
250. Macular Photocoagulation Study Group (L. Singerman a Principal Investigator and a member of the Writing Committee). Persistent and recurrent neovascularization after laser photocoagulation for subfoveal choroidal neovascularization. *Arch Ophthalmol* 1994;112:489-499.

251. Macular Photocoagulation Study Group. Visual outcome after laser photocoagulation for subfoveal choroidal neovascularization secondary to age-related macular degeneration. The influence of initial lesion size and initial visual acuity. *Arch Ophthalmol* 1994;112:480-488.
252. Lamkin JC, Singerman LJ. Laser therapy of choroidal neovascularization. *Semin Ophthalmology* 1994;9:10-22.
253. Central Vein Occlusion Study Group. Baseline and early Natural History Report: The Central Vein Occlusion Study (CVOS). *Arch Ophthalmol* 1993;111:1087-1095.
254. Ibanez H, Leshner MP, Singerman LJ, Rice TA, Keep GF. Prospective evaluation of the effect of pseudophakic cystoid macula edema on contrast sensitivity. *Arch Ophthalmol* 1993;111:1635-1639.
255. The Krypton Argon Regression of Neovascularization Study Group ( L. Singerman, National Study Co-Chairman and a Principal Investigator). Randomized comparison of krypton versus argon scatter photocoagulation for diabetic disc neovascularization. The Krypton Argon Regression of Neovascularization Study report number 1. *Ophthalmology* 1993;100:1655-1664.
256. Lamkin JC, Singerman LJ, Addiego R. Laser treatment of macular diseases. *Ophthalmol Clin North Amer* 1993;5(2):317-337.
257. Macular Photocoagulation Study Group. Laser photocoagulation of subfoveal neovascular lesions of age-related macular degeneration. Updated findings from two clinical trials. *Arch Ophthalmol* 1993;111:1200-1209.
258. Macular Photocoagulation Study Group. Five-year follow-up of fellow eyes of patients with age-related macular degeneration and unilateral extrafoveal choroidal neovascularization. *Arch Ophthalmol* 1993;111:1189-1199.
259. Lincoff H, Yannuzzi LA, Singerman LJ, Kreissig I, Fisher Y. Improvement in visual function after displacement of retinal elevations emanating from optic pits. *Arch Ophthalmol* 1993;111:1071-1079.
260. Collaborative Ocular Melanoma Study Group. Design and methods of a clinical trial for a rare condition: the Collaborative Ocular Melanoma Study. COMS Report No. 3. *Controlled Clin Trials* 1993;14:362-391.
261. Collaborative Ocular Melanoma Study Group. Complications of enucleation surgery. COMS Report No. 2. In Franklin RM (ed). *Proceedings of the Symposium on Retina and Vitreous, New Orleans Academy of Ophthalmology*. New York: Kugler Publications, 1993, pp 181-190.

262. The Diabetes Control and Complications Trial Research Group. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. *N Engl J Med* 1993;329:977-986.
263. Bressler N, Singerman LJ (Consultant). *American Academy of Ophthalmology Focal Points Module, Management of Choroidal Neovascularization* 1993;9(5) 9-12.
264. Fine SL, Wood WJ, Isernhagen RD, Singerman LJ, Bressler NM, Folk JC, Kimura AE, Fish GE, Maguire MG, Alexander J. Laser treatment for subfoveal neovascular membranes in ocular histoplasmosis syndrome: results of a pilot randomized clinical trial (Letter). *Arch Ophthalmol* 1993;111:19-20.
265. Ie D, Yannuzzi LA, Spaide R, Woodward KP, Singerman LJ, Blumenkranz MS. Microrips of the retinal pigment epithelium. *Arch Ophthalmol* 1992;110:1443-1449.
266. Donshik PC, Lewis RA, Singerman LJ. The eye in systemic disease 2: The retina. *Patient Care* 1992;26:179-200.
267. Singerman LJ. Update on Macular Photocoagulation Study. *Audio Journal Review: Ophthalmology*, Vol. 30, No. 12, June 18, 1992.
268. Singerman LJ. Pigment epithelial detachment: natural course and treatment. *Audio Journal Review: Ophthalmology*, Vol. 30, No. 12, June 18, 1992.
269. Macular Photocoagulation Study Group. Laser photocoagulation of subfoveal recurrent neovascular lesions in age-related macular degeneration. Results of a randomized clinical trial. *Arch Ophthalmol* 1991;109:1232-1241.
270. Macular Photocoagulation Study Group. Subfoveal neovascular lesions in age-related macular degeneration: Guidelines for evaluation and treatment in the Macular Photocoagulation Study. *Arch Ophthalmol* 1991;109:1242-1257.
271. Macular Photocoagulation Study Group. Laser photocoagulation of subfoveal recurrent neovascularization in age-related macular degeneration. Results of a randomized clinical trial. *Arch Ophthalmol* 1991;109:1232-1241.
272. Macular Photocoagulation Study Group. Laser photocoagulation of subfoveal recurrent neovascular lesions in age-related macular degeneration. Results of a randomized clinical trial. *Arch Ophthalmol* 1991;109:1219-1230.
273. Macular Photocoagulation Study Group. Argon laser photocoagulation for neovascular maculopathy. Five-year results from randomized clinical trials. *Arch Ophthalmol* 1991;109:1109-1114.
274. Fine SL, Maguire MG, Macular Photocoagulation Study Group. Krypton laser photocoagulation for neovascular lesions of age-related macular degeneration. *Arch Ophthalmol* 1991;109:614-615.

275. Singerman LJ. Summary and comment on Klein BEK, Moss SE, Klein R. Effect of pregnancy on progression of diabetic retinopathy. *Diabetes Spectrum* 1991;4:162-163.
276. Bressler SB, Maguire MG, Bressler NM, Fine SL, the Macular Photocoagulation Study Group. Relationship of drusen and abnormalities of the retinal pigment epithelium to the prognosis of neovascular macular degeneration. *Arch Ophthalmol* 1990;108:1442-1447.
277. Collaborative Ocular Melanoma Study Group. Accuracy of diagnosis of choroidal melanomas in the Collaborative Ocular Melanoma Study. COMS Report No. 1. *Arch Ophthalmol* 1990;108:1268-1273.
278. Schachat AP, Markowitz JA, Hawkins BS, Fine SL, Collaborative Ocular Melanoma Study Group. Nonocular cancers in patients with choroidal melanoma. [Letter] *Ophthalmology* 97:837-838, 1990.
279. Singerman LJ, Saggau D. In discussion: Blodi CV. Direct and feeder vessel photocoagulation of retinal angiomas with dye yellow laser. *Ophthalmology* 1990;97: 791-795; discussion 796-7.
280. Macular Photocoagulation Study Group. Krypton laser photocoagulation for idiopathic neovascular lesions. Results of a randomized clinical trial. *Arch Ophthalmol* 1990;108:832-837.
281. Macular Photocoagulation Study Group. Persistent and recurrent neovascularization after krypton laser photocoagulation for neovascular lesions of age-related macular degeneration. *Arch Ophthalmol* 1990;108:825-831.
282. Macular Photocoagulation Study Group (L. Singerman a Principal Investigator; Editorial Committee). Krypton laser photocoagulation for neovascular lesions of age-related macular degeneration. Results of a randomized clinical trial. *Arch Ophthalmol* 1990;108:816-824.
283. Stockfish JH, Singerman LJ. Choroidal hemangioma: fluorescein angiographic and ultrasonic results. *Semin Ophthalmol* 1989;4:65-68.
284. Novak MA, Singerman LJ. Commentary: Newsome DA. The boggy macula: a medical approach. *Clin Dec Ophthalmol* 1989;14:12-13.
285. Singerman LJ, Stockfish JH. Natural history of subfoveal pigment epithelial detachments associated with subfoveal or unidentifiable choroidal neovascularization complicating age-related macular degeneration. *Graefe's Arch Clin Exp Ophthalmology* 1989;27:501-507.
286. Chamberlin JA, Bressler NM, Bressler SB, Elman MJ, Murphy RP, Flood TP, Hawkins BS, Maguire MG, Fine SL, Macular Photocoagulation Study Group. The use of fundus photographs and fluorescein angiograms in the identification and treatment of choroidal neovascularization in the Macular Photocoagulation Study. *Ophthalmology* 1989;96(10):1526-1534.

287. Blackhurst DW, Maguire MG, Macular Photocoagulation Study Group. Reproducibility of refraction and visual acuity measurement under a standard protocol. *Retina* 1989;9(3):163-169.
288. Singerman LJ, Kalski RS. Tunable dye laser photocoagulation for choroidal neovascularization complicating age-related macular degeneration. *Retina* 1989;9:247-257.
289. Singerman LJ. Massive bilateral retinal vascular occlusion (Letter). *Retina* 1989;9:154.
290. Singerman LJ, Hionis R. In discussion: Vander J, Morgan C, Schatz H. Growth rate of subretinal neovascularization in age-related macular degeneration. *Ophthalmology* 1989; 96:1422-1426, discussion 1426-1429.
291. Donshik, PC, Lewis RA, Singerman LJ. Reading the retina in primary care. *Patient Care* 1989;23:53-57,60,63,66-67,71-72,78,83-85.
292. Maguire MG, Folk JC, Singerman LJ, Schachat AP, Blackhurst DW, Chamberlin JA, Bressler NM, Fine SL, Hawkins BS, Elman MJ for the Macular Photocoagulation Study Group. Persistent and recurrent neovascularization after krypton laser photocoagulation for neovascular lesions of ocular histoplasmosis. *Arch Ophthalmol* 1989;107:344-352.
293. Donshik PC, Lewis RA, Singerman LJ. Eye to eye with systemic disease. *Patient Care* 1989;23:35-41, 45-46.
294. The Kentucky Diabetic Retinopathy Group. Guidelines for eye care in patients with diabetes mellitus: results of a symposium. *Arch Int Med* 1989;149:769-770.
295. Singerman LJ. In discussion: Morgan C, Schatz H. Atrophic creep of the retinal pigment epithelium following focal macular photocoagulation. *Ophthalmology* 1989;96:96-102; discussion 102-103.
296. Yannuzzi LA, Friedman R, Fine SL, Gass JDM, Gitter KA, Orth DH, Singerman LJ. Symposium on age-related macular degeneration. *Bulletin of the New York Academy of Medicine* 1988;64:955-1013.
297. Singerman LJ, Fine SL, Gass JDM, Gitter KA, Orth DH. *Symposium on Age-related Macular Degeneration* (monograph), edited by Yannuzzi LA, Friedman R. Charles C. Morchand Co, Inc, 1988.
298. Singerman LJ, Ferris FL, Mowery RP, Brucker AJ, Murphy RP, Lerner BC, Mincey J. Krypton laser for proliferative diabetic retinopathy: The KARNS Study. *J Diabet Complications* 1988;2:189-196.
299. Novak MA, Singerman LJ. What are the current methods of managing central serous choroidopathy? Is laser treatment indicated and, if so, when in the course of the disease? *Ophthalmic Practice* 1988;6:170-171.

300. Straatsma BR, Fine SL, Earle JD, Hawkins BS, Diener-West M, McLaughlin JA, Collaborative Ocular Melanoma Study Research Group. Enucleation versus plaque irradiation for choroidal melanoma. *Ophthalmology* 1988;95:1000-1004.
301. Singerman LJ. Current management of choroidal neovascularization. *Ann Ophthalmol* 1988;20:415-423.
302. Singerman LJ. Laser photocoagulation for choroidal new vessel membrane complicating age-related macular degeneration associated with pigment epithelial detachment. *Retina* 1988;8:115-121.
303. Novak MA, Singerman LJ, Rice TA. Krypton and argon laser treatment for central serous chorioretinopathy. *Retina* 1987;7:162-169.
304. Macular Photocoagulation Study Group. Krypton laser photocoagulation for neovascular lesions of ocular histoplasmosis. Results of a randomized clinical trial. *Arch Ophthalmol* 1987;105:1499-1507.
305. Elman MJ, Fine SL, Sorenson J, Yannuzzi L, Hoopes J, Weidenthal D, Singerman LJ, Macula Society Research Committee. Skin necrosis following fluorescein extravasation: a survey of the Macula Society. *Retina* 1987;7:89-93.
306. Smith-Brewer S, Singerman LJ. Vision loss in age-related maculopathy: Primary care referral guide. *Geriatrics* 1987;42:99-106.
307. Singerman LJ. In discussion: Morgan C, Schatz H. Recurrent multifocal inner choroiditis. *Ophthalmology* 1986;93:1138-1143;discussion 1143-1147.
308. Singerman LJ. Fluorescein angiography: practical role in the office management of macular diseases. *Ophthalmology* 1986;93:1209-1215.
309. Singerman LJ. The early treatment diabetic retinopathy study: good news for diabetic patients and health care professionals. *Diabetes Care* 1986;9:426-429.
310. Macular Photocoagulation Study Group. Argon laser photocoagulation for neovascular maculopathy. Three-year results from randomized clinical trials. *Arch Ophthalmol* 1986;104:694-701.
311. Macular Photocoagulation Study Group (L. Singerman a Principal Investigator and a member of the Writing Committee). Recurrent choroidal neovascularization after argon laser treatment for neovascular maculopathy. *Arch Ophthalmol* 1986;104:503-512.
312. Singerman LJ, Wong B, Ai E, Smith S. Spontaneous visual improvement in the first affected eye of patients with bilateral disciform scars. *Retina* 1985;5:135-143.
313. Singerman LJ. Central serous chorioretinopathy. *Audio Journal Review*, Vol. II, No. 19, August 1985.



314. Fine SL, Macular Photocoagulation Study Group. Early detection of extrafoveal neovascular membranes by daily central field evaluation. *Ophthalmology* 1985;92:603-609.
315. Singerman LJ. Important points in management of patients with choroidal neovascularization. *Ophthalmology* 1985;92:610-614.
316. Singerman LJ. Peculiar foveomacular dystrophy. *EYESAT* (video tape), III:16.
317. Singerman LJ. Management of choroidal new vessel membranes and laser treatment of choroidal neovascularization. *EYESAT* (video tape), Vol. 11:5.
318. Macular Photocoagulation Study Group. Changing the protocol: A case report from the Macular Photocoagulation Study. *Control Clin Trials* 1984;5:203-216.
319. Macular Photocoagulation Study Group. Age-related macular degeneration. *Am J Ophthalmol* 1984;98:376-377.
320. Singerman LJ. Angioid streaks associated with hemolytic disorders (Letter). *Am J Ophthalmol* 1984;98: 647-648.
321. Grand G, Burgess D, Singerman LJ, Ramsey J. Choroidal osteoma: treatment of associated subretinal neovascular membranes. *Retina* 1984;4: 84-89.
322. Singerman LJ. Clinical studies of laser therapy for retinal diseases (Editorial). *Ann Ophthalmol* 1984;16:522-524.
323. Singerman LJ, Ferris FL. Krypton laser photocoagulation for proliferative diabetic retinopathy. *Lasers Surg Med* 1983.
324. Macular Photocoagulation Study Group. Argon laser photocoagulation for idiopathic neovascularization, results of a randomized clinical trial. *Arch Ophthalmol* 1983, 101:1358-1361.
325. Macular Photocoagulation Study Group. Argon laser photocoagulation for ocular histoplasmosis, results of a randomized clinical trial. *Arch Ophthalmol* 1983;101:1347-1357.
326. Singerman LJ. Total argon versus krypton versus partial laser photocoagulation for choroidal neovascularization in the presumed ocular histoplasmosis syndrome. *Int Ophthalmol Clin* 1983;23(2):83-100.
327. Macular Photocoagulation Study Group. Argon laser photocoagulation for senile macular degeneration (Editorial). *Arch Ophthalmol* 1983;101:1189-1190.
328. Singerman LJ. Angioid streaks in thalassaemia major (Letter). *Br J Ophthalmol* 1983;67:558.

329. Fine SL, Murphy RP, Macular Photocoagulation Study Group. Photocoagulation for choroidal neovascularization. *Ophthalmology* 1983;5 531-533.
330. Singerman LJ, Rodman HM, Passloff RW. Female predilection of high-risk proliferative diabetic retinopathy (Letter to the Editor response) *Retina* 1983;3:65-66.
331. Singerman LJ. Photocoagulation for proliferative diabetic retinopathy. *Retina Newsletter*, Vol. 1, No. 1, December 1982.
332. Singerman LJ. What are the criteria and indications for the panretinal photocoagulation treatment of proliferative diabetic retinopathy? *Ophthalmic Forum*, Fall Issue, 1982.
333. Macular Photocoagulation Study Group. Argon laser photocoagulation for senile macular degeneration, results of a randomized clinical trial. *Arch Ophthalmol* 1982;100:912-918.
334. Singerman LJ. Red krypton laser therapy of macular and retinal vascular diseases. *Retina* 1982;2:15-28.
335. Singerman LJ. Photocoagulation: current concepts and new approaches. *Audio Journal Review of Ophthalmology*, Vol. 8, No. 1, 1982.
336. Singerman LJ. Vitrectomy for complications of proliferative diabetic retinopathy. *Clin Dec Ophthalmol* 1982;6:3-5.
337. Singerman LJ, Hatem G. Laser treatment of subretinal neovascular membranes in angioid streaks. *Retina* 1981;1:75-83.
338. Singerman LJ, Weaver DT. High-risk proliferative diabetic retinopathy in juvenile onset diabetics. *Retina* 1981;1:18-26.
339. Singerman LJ, Guest Editor, *Albrecht Von Graefes Arch Klin Exp Ophthalmol* 1980;1-70.
340. Singerman LJ, Schlaegel T, Orth DH, Joondeph H. Randomized controlled clinical trial of partial laser treatment of choroidal neovascularization in the histoplasmosis ocular syndrome. *Documenta Ophthalmologica Proceedings* 1980;25:141-148.
341. Lewellen D, Singerman LJ. Thrombotic thrombocytopenic purpura with disc neovascularization, vitreous hemorrhage, retinal detachment, and optic atrophy. *Am J Ophthalmol* 1980;89:840-844.
342. Yassur Y, Pickle L, Fine SL, Singerman LJ, Orth DH, Patz A. Optic disc neovascularization in diabetic retinopathy: natural history and results of photocoagulation treatment. *Br J Ophthalmol* 1980;64 (2):77-86.
343. Yassur Y, Pickle L, Fine SL, Singerman LJ, Orth DH, Patz A. Optic disc Neovascularization in diabetic retinopathy: a system for grading proliferation at the optic

nerve head in patients with proliferative diabetic retinopathy. *Br J Ophthalmol* 1980;64:69-76.

344. Singerman LJ, Berkow JW, Patz A. Dominant slowly progressive macular dystrophy. *Am J Ophthalmol* 1977;83:680-693.
345. Meredith TA, Kenyon KR, Singerman LJ, Fine SL. Perifoveal vascular leakage and macular edema after intracapsular cataract extraction. *Br J Ophthalmol* 1976;11:765-769.

### **Online Publications**

1. RETINA CONVERSATIONS: A Conversation With Lawrence Singerman, MD. *Retinal Physician*, Volume: 14, Issue: October 2017, page(s): 16, 17.  
<https://www.retinalphysician.com/issues/2017/october-2017/retina-conversations-a-conversation-with-lawrence>
2. The eyes have it. <https://clevelandmagazine.com/health/articles/the-eyes-have-it>

### **Electronic Publications**

1. Singerman LJ. Diabetic retinopathy. Palm Pilot edition, 2001, 2006.
2. Singerman LJ. Anti-VEGF therapy for exudative AMD.  
<http://www.ophthalmic.hyperguides.com>. Accessed 1 February 2005.

### **Selected Abstracts**

1. Singerman LJ, Macugen Diabetic Retinopathy Study Group. Findings of the Phase 2 Trial of the safety and efficacy of pegaptanib sodium (Macugen™) in patients with diabetic macular edema. ARVO abstract #4674, 2005 (<http://www.arvo.org>).
2. Safety and efficacy of pegaptanib sodium (Macugen™) in patients with diabetic macular edema: results of the Phase 2 Trial. Macula Society Abstracts, 2005, p.190.
3. Hudson HL, Martin DF, Berinstein DM, Singerman LJ, Leonard RE, Heier JS, Dehning DO, Connolly BP, IMT-002 Study Group. The Implantable Miniature Telescope in patients with macular degeneration – results of the Phase II/III IMT-002 trial at three months. ARVO abstract #2365, 2004 (<http://www.arvo.org>).
4. Slakter JS, Singerman LJ, Yannuzzi LA, Russell SR, Hudson HL, D'Amico DJ, Jerdan J, Zilliox P, Robertson SM, Anecortave Acetate Study Group. Retina Congress 2002 (The 20th Annual Vitreous Society and The 35th Annual Retina Society Meeting). Anecortave acetate administered as a posterior juxtасlеral injection for subfoveal CNV in age-related macular degeneration (AMD) – clinical results.  
[http://www.vitreoussociety.org/sf2002/Symposium\\_8.html](http://www.vitreoussociety.org/sf2002/Symposium_8.html). Accessed 14 October 2002.

5. Beaumont P, Singerman LJ, Lees M, Schulz M, Aldridge G. Economic evaluation of photodynamic therapy with verteporfin for predominantly classic subfoveal CNV secondary to AMD. Retina Congress 2002 (The 20th Annual Vitreous Society and The 35th Annual Retina Society Meeting). [http://www.vitreoussociety.org/sf2002/Poster\\_2.html](http://www.vitreoussociety.org/sf2002/Poster_2.html). Accessed 14 October 2002.
6. AC Ho, the VAM Study Group. The VAM Study: An open-label, multicenter, safety study of verteporfin therapy for predominantly classic subfoveal choroidal neovascularization (CNV) due to AMD. ARVO Abstracts, #979, 2002.
7. Slakter JS, Singerman LJ, Yannuzzi LA, Russell SR, Hudson HL, Jerdan J, Zilliox P, Robertson S, the Anecortave Acetate Study Group. Sub-Tenon's administration of the angiostatic agent anecortave acetate in AMD patients with subfoveal choroidal neovascularization (CNV) - the clinical outcome. ARVO Abstracts, #2909, 2002.
8. Schwartz SD, Blumenkranz M, Rosenfeld PJ, Miller JW, Haller J, Fish G, Lobes L, Singerman LJ, Greene WL, Reimann J. Safety of rhuFabV2, an anti-VEGF antibody fragment, as a single intravitreal injection in subjects with neovascular age-related macular degeneration. ARVO Abstracts, #2807, 2001.
9. Maguire MG, Fine SL, Maguire AM, D'Amato RJ, Singerman LJ, the AMDATS Research Group. Results of the Age-related Macular Degeneration and Thalidomide Study (AMDATS). ARVO Abstracts, #1255, 2001.
10. Singerman LJ, Yannuzzi LA, Russell S, Hudson HL, Jerdan J, the Anecortave Acetate Research Group. Sub-Tenon's retrobulbar anecortave acetate with and without Visudyne photodynamic therapy in patients with subfoveal choroidal neovascularization in age-related macular degeneration (AMD). ARVO Abstracts, #1246, 2001.
11. Singerman L, TAP Study Group. Photodynamic therapy of subfoveal choroidal neovascularization in age-related macular degeneration using verteporfin (Visudyne): exploratory analysis of good visual outcomes—TAP Report #4. ARVO Abstracts, #2829, 2000.
12. Cingle KA, Kalski RS, Bruner WE, Kanter L, Yoo SH, Cano DB, Wyszynski RE, Singerman LS. Age-dependent lysosomal enzyme activity of fresh retinal pigment epithelial cells from human eye donors. *Invest Ophthalmol Vis Sci* 33:S2377, 1994.
13. Kalski RS, Cano DB, Bruner WE, Wyszynski RE, Kanter L, Yoo SH, Miranda DM, Schloff S, Singerman LJ. Serum retinol binding protein and transthyretin levels from patients with age-related macular degeneration. *Invest Ophthalmol Vis Sci* 34:S2958, 1993.
14. Plantner JJ, Drew TA, Dwyer GJ, Singerman LJ. Metalloproteinases of the interphotoreceptor matrix. *Invest Ophthalmol Vis Sci* 34:1204, 1993.
15. Alexander J, Marsh MJ, Schachat AP, Fine SL, Macular Photocoagulation Study Group. Causes of decreased visual acuity in patients with peripapillary or nasal choroidal

- neovascularization (CNV) and ocular histoplasmosis (OH) in the Macular Photocoagulation Study (MPS). *Invest Ophthalmol Vis Sci* 1993;34:1162.
16. Fine SL, Maguire MG, Hiner CJ, Javornik NB, Folk JC, Chandra S, Macular Photocoagulation Study Group. Modifiers of treatment benefit after photocoagulation of subfoveal choroidal neovascularization secondary to age-related macular degeneration. *Invest Ophthalmol Vis Sci* 1993;34:1134.
  17. Bressler SB, Bressler NM, Jeffreys J, Alexander J, Macular Photocoagulation Study Group. Evaluation of green versus red laser for photocoagulation of subfoveal choroidal neovascularization in the Macular Photocoagulation Study (MPS). *Invest Ophthalmol Vis Sci* 1993;34:1134.
  18. Zhou L, Chokreff JM, Singerman LJ. High precision retinal vessel diameter measurement in angiography. *Invest Ophthalmol Vis Sci* 34:840, 1993.
  19. McCaffrey L, Javornik NB, Macular Photocoagulation Study Group. Ophthalmologists and ophthalmic photographers certified in a large multicenter trial. *Control Clin Trials* 1992;13:405.
  20. Alexander J, Javornik NB, Maguire MG, Bressler NM, Macular Photocoagulation Study Group. Effect of the variability in photographic quality on a grading scheme of drusen characteristics and retinal pigment epithelium abnormalities. *Invest Ophthalmol Vis Sci* 1992;33:1230.
  21. Cano DB, Schloff S, Miranda DM, Kalski RS, Bruner WE, Wyszynski RE, Yoo SH, Singerman LJ. Serum alpha-mannosidase, albumin, protein, and zinc levels from patients with age-related macular degeneration. *Invest Ophthalmol Vis Sci* 1992;33:802.
  22. Bruder SP, Bardenstein DS, Singerman LJ. Monoclonal antibody SB-3 reacts specifically with basement membrane of the retinal pigment epithelium. *Invest Ophthalmol Vis Sci* 1992;33:1205.
  23. Maguire MG, Rubin G, Blackhurst D, Macular Photocoagulation Study Group. Factors influencing reading ability in patients with choroidal neovascularization. *Invest Ophthalmol Vis Sci* 1991;32:815.
  24. Lewis ML, Borup MD, Elman MJ, Singerman LJ. Photocoagulation of pigment epithelial detachments: results of a randomized prospective pilot study. *Invest Ophthalmol Vis Sci* 1991;32 (suppl):235.
  25. Miranda DM, Kalski RS, Cano DB, Bruner WE, Wyszynski RE, Singerman LJ. A decrease in alpha-mannosidase in the serum of patients with age-related macular degeneration and the augmentation of its activity with zinc. *Invest Ophthalmol Vis Sci* 1991;32 (suppl):231.

26. Maguire MG, Macular Photocoagulation Study Group. Application of longitudinal data analysis in a clinical trial: The Macular Photocoagulation Study Group. *Control Clin Trials* 1990;11:262.
27. Maguire MG, Bressler NM, Chamberlin JA, Macular Photocoagulation Study Group. The influence of extent of treatment on visual outcome among patients treated with krypton laser for choroidal neovascularization. *Invest Ophthalmol Vis Sci* 1990;31:48.
28. Bressler SB, Bressler NM, Maguire MG, Fine SL, Macular Photocoagulation Study Group. Relationship of drusen characteristics in the fellow eye to the development of recurrent choroidal neovascularization after treatment in the first eye. *Invest Ophthalmol Vis Sci* 1990;31:48.
29. Blackhurst DW, Orr PR, Hawkins BS, Macular Photocoagulation Study Group. Patient and clinic factors predictive of missed visits and inactive status in a clinical trial. *Control Clin Trials* 1989;10:335.
30. Maguire MG, Macular Photocoagulation Study Group. Methods for detecting mislabeled data from multiple studies per patient. *Control Clin Trials* 1989;10:354.
31. Blackhurst DW, Orr PR, Hawkins BS, Macular Photocoagulation Study Group. Patient and clinic factors predictive of missed visits and inactive status in a clinical trial. *Control Clin Trials* 1989;10:335.
32. Maguire MG, Macular Photocoagulation Study Group. Development of new clinical measures for a randomized trial. *Control Clin Trials* 1988;9:278.
33. Macular Photocoagulation Study Group. Randomized trials for neovascular membranes within the foveal avascular zone. *Ophthalmology* 1986;93 (suppl):131.
34. Novak MA, Singerman LJ, Rice TA. Recurrences in central serous chorioretinopathy. XXV International Congress of Ophthalmology, Rome, May 1986, p. 288.
35. Flood TP, Singerman LJ, Orth DH. Early and late complications of krypton red laser photocoagulation for choroidal neovascularization. XXV International Congress of Ophthalmology, Rome, May 1986, p. 276.
36. Ferris FL, Singerman LJ. Inexpensive collaborative clinical research. *Invest Ophthalmol Vis Sci* 1983;Vol. 24 (suppl).

### **Book reviews**

1. Natarajan S, Sharma S, Mehta HB. *Diagnostics in Macular Disorders. An Overview of FFA, ICGA and OCT*. Foreword by Lawrence J. Singerman. New Delhi: Jaypee Brothers Medical Publishers, 2005.

2. Bloom SM, Brucker AJ. *Laser Surgery of the Posterior Segment*, 2nd edition (1997), Lippincott-Raven. *Am J Ophthalmol* 1997;124:576.
3. Puliafito CA, Hee MR, Schuman JS, Fugimoto JG. *Optical Coherence Tomography of Ocular Diseases* (1996), Slack, Inc. *Am J Ophthalmol* 1996;122:455-456.

## SELECTED LECTURES, PAPERS, AND POSTERS PRESENTED AT ANNUAL MEETINGS

### AMERICAN ACADEMY OF OPHTHALMOLOGY

OCTOBER 26-30, 2018, CHICAGO, ILLINOIS

- *Co-chair and co-moderator (with Lloyd P Aiello), Retina Subspecialty Day. The Art + Science of Retina + Vitreous. Section XVI: Diabetes*
- *Moderator, Retina Round Table Breakfast with the Experts, cosponsored by the Macula Society. Age-related macular degeneration*
- *Co-author with Arshad M Khanani, Rahul Khurana, and Carol Hoang. Poster PO487, Checkup mobile app to monitor visual function in diabetic retinopathy and AMD: The Clear Study.*
- *Co-chair (with James C Folk), the Macula Society Symposium. Retina imaging: new insights into disease and treatment*

NOVEMBER 11–14, 2017, NEW ORLEANS, LOUISIANA

- *Chair and Introductory Speaker, the Macula Society Symposium. Current management of neovascular AMD*
- *Introductory Speaker, the Arnall Patz Lecture. DRCR Network: accomplishments and vision for the future, by Neil M Bressler, MD*

OCTOBER 15–18, 2016, CHICAGO, ILLINOIS

- *Introductory Speaker, the Arnall Patz Lecture, cosponsored by the Macula Society. The retina specialist: Do we practice evidence-based medicine? by Paul Sternberg Jr, MD*

NOVEMBER 13–17, 2015, LAS VEGAS, NEVADA

- *Introductory Speaker, the Macula Society Symposium. A clinician's guide to the management of neovascular AMD*

OCTOBER 17–21, 2014, CHICAGO, ILLINOIS

- *Co-chair, the Macula Society Symposium. Lessons learned from recent clinical trials on diabetic retinopathy*
- *Co-moderator and Conclusion and Self-assessment Speaker, Retina 2014. Diabetes*

NOVEMBER 15–19, 2013, NEW ORLEANS, LOUISIANA

- *Co-moderator, Retina 2013. First-time results of clinical trials*
  - *First AAO Virtual Meeting*

NOVEMBER 9-13, 2012, CHICAGO, ILLINOIS

- *Panelist, Retina 2012, Management of neovascular AMD in 2012*
- *Co-Chair and Concluding Speaker, the Macula Society Symposium. Advances in the treatment of diabetic retinopathy*

## OCTOBER 21–25, 2011, ORLANDO, FLORIDA

- *Co-Chair, Retina 2011. Neovascular AMD*
- *Co-Chair and Concluding Speaker, the Macula Society Symposium. Advances in the treatment of neovascular AMD*

## OCTOBER 15–19, 2010, CHICAGO, ILLINOIS

- *Speaker, Retina 2010. Pharmacotherapies for the reduction of retinal toxins*

## OCTOBER 23–27, 2009, SAN FRANCISCO, CALIFORNIA

- *Moderator (with Albert J. Augustin, MD), Retina 2008. AMD Part III, Exudative AMD*
- *Discussant, Retina 2009, Retina Luncheon Discussion Groups. Pharmacologic treatments for AMD*
- *Co-Chair, Introductory Speaker, and Concluding Speaker, the Macula Society Symposium. Evaluation and management of macular edema*
- *Panelist, Retina, vitreous original paper session, AMD*
  - Nussenblatt RB, A randomized pilot study of AMD with systemic immunosuppressive therapy
  - Kuppermann BD, Interference of cell survival signals by targeting  $\alpha5\beta1$  integrin (Volociximab) and VEGF in neovascular AMD: A phase 1 study
  - Ho AC, Targeting platelet derived and vascular endothelial growth factors for neovascular AMD: phase 1 study
  - Rosenfeld PJ, Phase 1 results of the complement C3 inhibitor POT-4 in AMD
  - Roth DB, Inferior intravitreal injection site associated with higher incidence of post-injection endophthalmitis
- *Presenter, Media Briefing, Eye Medicine in the News. 2009 Year in Review. Advances in the management of dry age-related macular degeneration*

## NOVEMBER 7–11, 2008, ATLANTA, GEORGIA

- *Speaker, Retina 2008. Fenretinide and AMD*
- *Discussant, Retina 2008, Retina Luncheon Discussion Groups. Management of vein occlusions*
- *Co-Chair, Introductory Speaker, and Concluding Speaker, the Macula Society Symposium. Current advances in the management of AMD*
- *Co-Chair and Panelist. Retina, vitreous original paper session AMD*

## NOVEMBER 9–13, 2007, NEW ORLEANS, LOUISIANA

- *Speaker, Retina 2007. Summary of other macular degeneration therapies under investigation*

## NOVEMBER 10–14, 2006, LAS VEGAS, NEVADA

- *Speaker, Retina 2006. Efficacy and safety of pegaptanib (Macugen): three-year results; Section II, AMD and pharmacologic monotherapy*
- *Speaker, Developing a low vision services team in an ophthalmology practice. Special Meeting, Vision rehabilitation program; Part II, Currents trends in vision rehabilitation*
- *Co-Chair and Introductory Speaker, the Macula Society Symposium. Diagnosis and management of macula edema from retinal vascular diseases*
- *Moderator, Breakfast with the Experts. Pharmacotherapy for AMD*



## OCTOBER 14–18, 2005, CHICAGO, ILLINOIS

- *Speaker, Retina 2005*. Changing concepts and controversies: Controversies in age-related macular degeneration; Section II, Pharmacologic therapy for visually significant AMD: Macugen update
- *Moderator, Breakfast with the Experts*. Pharmacotherapy for AMD
- *Co-Chair and Introductory Speaker, the Macula Society Symposium*. Pharmacotherapy for macular diseases
- *Co-author* (with Hudson HL, Martin DF, Berinstein DM, Heier JS, Kuppermann BD). One-year Phase 2/3 results of a visual prosthetic device for the treatment of vision loss due to macular degeneration (Paper)
- *Co-author* (with Sharma MC, Miller DG, Zakov ZN, Pendergast SD, Novak MA, Zegarra H). Results of the surgical management of idiopathic epiretinal membrane (Poster)

## OCTOBER 22–26, 2004, NEW ORLEANS, LOUISIANA

- *Moderator, Panel Discussion, Retina 2004*. Alternative, pharmacologic, and surgical treatment of AMD, AMD case presentation and discussion
- *Formal Discussion of Paper*. The nature of the neovascularization in the fellow eye in patients with unilateral retinal angiomatous proliferation by Aizman A, Gross NE, Brucker AJ, Yannuzzi LA
- *Co-author* (with Heier JS, Hudson HL, Martin DF, Berinstein DM, Sternberg P Jr). An implantable miniature telescope for the treatment of moderate to profound vision loss due to macular degeneration (Paper)
- *Moderator*. Current status of pharmacologic treatment of AMD (anti-VEGF, anecortave acetate)
- *Speaker*. Macular degeneration: management 20 years ago. Symposium, Twenty years of progress in the treatment of retinal diseases: Where we have been, where we are now, and where we will be

## NOVEMBER 15–18, 2003, ANAHEIM, CALIFORNIA

- *Panelist, Retina 2003*. The Experts Debate: Controversies in age-related macular degeneration
- *Co-Chair and Introductory Speaker, the Macula Society Symposium*. Update on the treatment of age-related macular degeneration
- *Formal Discussion of Paper*. Combined photodynamic therapy with verteporfin and intravitreal triamcinolone acetonide for choroidal neovascularization secondary to age-related macular degeneration by Spaide RF, Sorenson JA, Maranan LC
- *Instructor, Skills Transfer Course*. Photodynamic therapy: current treatment guidelines for choroidal neovascularization
- *Instructor, Skills Transfer Course*. Diabetes 2003: Workshop on diabetic retinopathy

## OCTOBER 19–23, 2002, ORLANDO, FLORIDA

- *Section Co-Chair, Retina 2002*. The retinal office in the new millennium
- *Senior Instructor, Instructional Course*. Update from the Macula Society 2002: Impact of randomized clinical trials on the treatment of retinal diseases
- *Co-Chair and Introductory Speaker, the Macula Society Symposium*. Update on diabetic retinopathy

- *Moderator, Heidelberg Symposium.* Indocyanine green angiography for identification of feeder vessels associated with choroidal neovascularization
- *Co-author* (with Slakter JS, Yannuzzi LA, Russell SR, Hudson HL, D'Amico DJ, Jerdan J, Zilliox P, Robertson SM, the Anecortave Acetate Study Group. Anecortave acetate administered as posterior juxtасcleral injection in patients with subfoveal choroidal neovascularization in AMD (Paper)
- *Instructor, Skills Transfer Course.* Photodynamic therapy: current treatment guidelines for choroidal neovascularization
- *Instructor, Skills Transfer Course.* Diabetes 2002: Workshop on diabetic retinopathy
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion

## NOVEMBER 10–14, 2001, NEW ORLEANS, LOUISIANA

- *Speaker, 2001 Opening Session and Business Meeting.* Current studies on photodynamic therapy for age-related macular degeneration
- *Panelist, Retina 2001.* Controversies in the management of subfoveal choroidal neovascularization
- *Senior Instructor, Instructional Course.* Update from the Macula Society 2001: Impact of randomized clinical trials on the treatment of retinal diseases
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Instructor, Skills Transfer Course.* Diabetes 2001: Workshop on diabetic retinopathy
- *Instructor, Skills Transfer Course.* Photodynamic therapy: current treatment guidelines for choroidal neovascularization

## OCTOBER 19–25, 2000, DALLAS, TEXAS

- *Speaker.* Anecortave acetate: What's going on?
- *Panelist, Retina 2000.* Photodynamic therapy: Controversies and consensus
- *Instructor.* Update from the Macula Society: Impact of randomized clinical trial results on treating retinal diseases.
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Instructor, Skills Transfer Course.* Current treatment guidelines for choroidal neovascularization
- *Presiding Officer and Introductory Speaker, the Macula Society Symposium:* New therapies for age-related macular degeneration

## OCTOBER 22–27, 1999, ORLANDO, FLORIDA

- *Formal Discussion of Paper.* Light panretinal photocoagulation (LPRP) versus classic panretinal photocoagulation (CPRP) in proliferative diabetic retinopathy (PDR) by Bandello FM, Brancato R, Menchini U, Lanzetta P
- *Presiding Officer.* Free papers, Retina section
- *Presiding Officer and Introductory Speaker, the Macula Society Symposium.* Infectious diseases of the choroid and retina
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Instructor, Skills Transfer Course.* Guidelines from the Macular Photocoagulation Study for evaluating and treating choroidal neovascularization
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop
- *Instructor.* Update from the Macula Society: Impact of randomized clinical trial results for age-related macular degeneration

- *Panelist, Vitreoretinal Update 1999.* A whole new world? Practical advice for dealing with patients with subfoveal CNV in 2000

NOVEMBER 5–11, 1998, NEW ORLEANS, LOUISIANA

- *Co-author.* Paper, with Maberley DA, Yannuzzi LA, Gitter KA. Radiation exposure: a new risk factor for idiopathic parafoveal telangiectasia (IPT)
- *Co-presenter* (with Tabandeh H, Flynn HW, Lewis ML, Rodriguez FJ, Rodriguez A). Visual outcomes of untreated submacular neovascular membrane in patients with high myopia and age 50 years and over (Poster)
- *Presiding Officer.* Free papers, Retina section
- *Symposium Presiding Officer.* Vitreoretinal Update 1998
- *Discussion Leader.* Diabetic macular edema
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Instructor, Skills Transfer Course.* Guidelines from the Macular Photocoagulation Study for evaluating and treating choroidal neovascularization
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop

OCTOBER 24–30, 1997, SAN FRANCISCO, CALIFORNIA

- *Chairperson and Introductory Speaker, the Macula Society Symposium.* Age-related macular degeneration
- *Symposium Chairperson.* Retinal transplantation and translocation
- *Symposium Panelist.* Age-related macular degeneration
- *Course Speaker.* Central retinal vein occlusion
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Instructor, Skills Transfer Course.* Macular Photocoagulation Studies guidelines for treatment
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop

OCTOBER 25–31, 1996, CHICAGO, ILLINOIS

- *Moderator of Vitreoretinal Frontiers: 21st Century.* Management of age-related macular degeneration
- *Formal Discussion of Paper.* ICG videoangiography of drusen as a possible predictive indicator for exudative maculopathy, by Hanutsaha P, Guyer DR, Yannuzzi LA, et al
- *Co-Chairperson and Speaker, the Macula Society Symposium.* Retinal and choroidal manifestations of systemic diseases
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop

OCTOBER 27–NOVEMBER 2, 1995, ATLANTA, GEORGIA

- *Speaker, the Macula Society Symposium.* Inflammatory chorioretinal diseases
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop
- *Speaker.* Central Vein Occlusion Study Symposium – Evaluation of prophylactic photocoagulation in non-perfused central vein occlusion
- *Formal Discussion of Paper.* Persistence and recurrence of choroidal neovascularization after photocoagulation in age-related macular degeneration

OCTOBER 29–NOVEMBER 3, 1994, SAN FRANCISCO, CALIFORNIA

- *Presiding Officer and Director of Symposium.* Systemic vascular diseases and the eye
- *Senior Instructor.* Guidelines and treatment for choroidal neovascularization in the MPS

- *Course Speaker.* Preretinal, intraretinal, and subretinal disorders
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop
- *Instructor, Skills Transfer Course.* Branch and central vein occlusion

## NOVEMBER 14–18, 1993, CHICAGO, ILLINOIS

- *Formal Discussion of Paper.* Digital indocyanine green videoangiography of occult choroidal neovascularization by Guyer D, Yannuzzi L, Slakter J, Hope-Ross M, Latsoudis P, et al
- *Associate Instructor, Skills Transfer Course.* Branch and central vein occlusion
- *Senior Instructor.* Guidelines for the evaluation and treatment of choroidal neovascularization in the MPS
- *Course Speaker.* Occult subretinal new vessels in age-related macular degeneration. Topic: Management of pigment epithelial detachments
- *Course Speaker.* Preretinal, intraretinal, and subretinal disorders
- *Introductory Speaker at Symposium.* Advances in fundus imaging
- *Co-Chairman.* Free papers, Retina section

## NOVEMBER 8–12, 1992, DALLAS, TEXAS

- *Co-author.* Krypton Argon Regression of Neovascularization Study: results of a randomized clinical trial
- *Co-Chairman and Summarizing Speaker, the Macula Society Symposium.* Hereditary retinal disorders
- *Speaker, the Retina Society Symposium.* Debate on controversies in the management of vitreoretinal disorders. Topic: (Pro) Is laser treatment of subfoveal neovascularization beneficial?
- *Co-author (with Ibanez HE, Leshner MP, Rice TA, Keep GF).* Prospective evaluation of the effect of pseudophakic cystoid macular edema on contrast sensitivity (Poster)
- *Senior Instructor.* Guidelines for the evaluation and treatment of choroidal neovascularization in the MPS
- *Associate Instructor, Skills Transfer Course.* Retinal vein occlusion
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop
- *Course Speaker.* Occult subretinal new vessels in age-related macular degeneration. Topic: Management of pigment epithelial detachments
- *Course Speaker.* Preretinal, intraretinal, and subretinal disorders. Topic: Other causes of choroidal neovascularization

## OCTOBER 13–17, 1991, ANAHEIM, CALIFORNIA

- *Co-Chairman and Introductory Speaker, Symposium.* Current concepts in evaluation and management of diseases causing retinal and iris neovascularization
- *Course Speaker.* Rare, unusual, and/or interesting medical retinal cases
- *Course Speaker.* Unusual causes of CNV
- *Course Speaker.* Management of pigment epithelial detachments
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop

## OCTOBER 28–NOVEMBER 1, 1990, ATLANTA, GEORGIA

- *Co-Chairman and Summarizing Speaker, Symposium.* Pathogenesis, diagnosis, and management of less common causes of choroidal neovascular membranes
- *Course Director.* Evaluation and management of proliferative diabetic retinopathy

- *Course Speaker.* Rare, unusual, and/or interesting medical retinal cases
- *Course Speaker.* Unusual causes of CNV
- *Course Speaker.* Management of pigment epithelial detachments
- *Instructor, Skills Transfer Course.* Diabetes 2000 Diabetic Retinopathy Workshop

OCTOBER 29–NOVEMBER 2, 1989, NEW ORLEANS, LOUISIANA

- *Co-Chairman, Symposium.* Update on cystoid macular edema
- *Formal Discussion of Paper.* Direct and feeder vessel photocoagulation of retinal angiomas with dye yellow laser, by CV Blodi
- *Co-author* (with JC Folk, HJ Kaplan, Blumenkranz MS, Yannuzzi LA). Macula Society Exhibit: Choroidal and retinal inflammatory syndromes
- *Course Director.* Evaluation and management of proliferative diabetic retinopathy
- *Course Speaker.* Rare, unusual, and/or interesting medical retinal cases
- *Course Speaker.* Diagnosis and treatment of preproliferative and proliferative diabetic retinopathy
- *Course Speaker.* Management of pigment epithelial detachments

OCTOBER 8–12, 1988, LAS VEGAS, NEVADA

- *Co-Chairman, Symposium.* Retinal and choroidal manifestations of systemic disease
- *Formal Discussion of Paper.* Speed of growth of subretinal neovascularization in age-related macular degeneration, by J Vander, H Schatz, C Morgan
- *Co-author* (with Murphy RP, Yeo JH, Marmor MF, Shakin JL, Blumenkranz MS). Macula Society Exhibit: The appearance and progression of retinal pigment epithelial rips
- *Co-author and Principal Investigator with the Macular Photocoagulation Study Group.* Laser treatment for subfoveal neovascular membranes in the Macular Photocoagulation Study (Poster)
- *Co-author and Principal Investigator with the Macular Photocoagulation Study Group.* Macular Photocoagulation Study Reading Center techniques to evaluate choroidal neovascularization and laser treatment (Poster)
- *Course Director.* Evaluation and management of proliferative diabetic retinopathy
- *Course Speaker.* Rare, unusual, interesting, and/or instructive medical retinal cases
- *Course Speaker.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* The macula: preretinal, intraretinal, and subretinal disorders
- *Course Speaker.* Argon and krypton laser photocoagulation for posterior segment disorders

NOVEMBER 7–12, 1987, DALLAS, TEXAS

- *Chairman, Symposium.* State of the art management of common ocular disorders – a salute to the NIH centennial
- *Formal Discussion of Paper.* Atrophic creep of the retinal pigment epithelium following focal macular photocoagulation, by Morgan C, Schatz H
- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* Laser therapy for proliferative diabetic retinopathy
- *Course Speaker.* Pregnancy and diabetes
- *Course Speaker.* The Krypton Argon Regression of Neovascularization Study (KARNS)
- *Course Speaker.* Management of pigment epithelial detachments
- *Course Speaker.* Application of the dye laser

## NOVEMBER 10–13, 1986, NEW ORLEANS, LOUISIANA

- *Co-Chairman, Symposium.* Diabetic retinopathy: ten years after the Diabetic Retinopathy Study
- *Symposium Speaker.* Krypton laser for proliferative diabetic retinopathy and the KARNs
- *Co-author and Principal Investigator with the Macular Photocoagulation Study Group.* The Macular Photocoagulation Studies: randomized trials for neovascular membranes within the foveal avascular zone (Poster)
- *Co-author and Principal Investigator with the Macular Photocoagulation Study Group.* Recurrent choroidal neovascularization after argon laser photocoagulation for neovascular maculopathies (Poster)
- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* Laser therapy of choroidal neovascularization (CNV) associated with pigment epithelial detachments (PED) in patients over the age of 55
- *Course Speaker.* Diabetic retinopathy and pregnancy
- *Course Speaker.* Clinical experience with the tunable dye laser
- *Course Speaker.* Krypton laser for proliferative diabetic retinopathy

## SEPTEMBER 29–OCTOBER 4, 1985, SAN FRANCISCO, CALIFORNIA

- *Symposium Speaker.* Fluorescein angiography: practical role in the office management of macular diseases
- *Formal Discussion of Paper.* Recurrent multifocal inner choroiditis, by Morgan C, Schatz H
- *Co-author (with Ai E, Green WR, Coonan P, Steinmetz R).* Exhibit: Age-related maculopathy: clinical course, histopathology and treatment
- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* Krypton argon regression of neovascularization study
- *Course Speaker.* Diabetic retinopathy and pregnancy
- *Course Speaker.* Laser for complicated cases of choroidal neovascular membranes
- *Course Speaker.* YAG laser vitreous surgery

## NOVEMBER 9–15, 1984, ATLANTA, GEORGIA

- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* The macula: preretinal, intraretinal, and subretinal disorders
- *Course Speaker.* Laser photocoagulation for posterior and anterior segment disorders
- *Course Speaker.* YAG laser surgery for the practicing ophthalmologist

## OCTOBER 29–NOVEMBER 3, 1983, CHICAGO, ILLINOIS

- *Symposium Speaker.* Important points in management of patients with choroidal new vessel membranes (NVMs)
- *Co-author.* Macula Society Exhibit: Acute retinal necrosis syndrome
- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* The macula: preretinal, intraretinal, and subretinal disorders
- *Course Speaker.* Laser photocoagulation for posterior and anterior segment disorders

## NOVEMBER 1982, SAN FRANCISCO, CALIFORNIA

- *Co-Chairman, Symposium.* Update on macular diseases
- *Chairman.* Macula Society Exhibit: Evaluation and management of proliferative retinopathies

- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* Complications of argon laser photocoagulation: prevention and management
- *Course Speaker.* The macula: preretinal, intraretinal, and subretinal disorders

NOVEMBER 1981, ATLANTA, GEORGIA

- *Chairman.* Macula Society Exhibit: Current evaluation and management of macular diseases.
- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* The macula: preretinal, intraretinal, and subretinal disorders
- *Course Speaker.* Complications of argon laser photocoagulation: prevention and management

NOVEMBER 1980, CHICAGO, ILLINOIS

- *Course Director.* Evaluation and management of proliferative retinopathies
- *Course Speaker.* Complications of argon laser photocoagulation: prevention and management

NOVEMBER 1978, KANSAS CITY, KANSAS

- *Course Speaker.* Randomized clinical study of partial laser treatment of choroidal neovascularization in the histoplasmosis syndrome

NOVEMBER 1977, DALLAS, TEXAS

- *Course Speaker.* Complications of argon laser photocoagulation: prevention and management

NOVEMBER 1976, LAS VEGAS, NEVADA

- *Course Speaker.* Complications of argon laser photocoagulation: prevention and management

## ASSOCIATION FOR RESEARCH IN VISION AND OPHTHALMOLOGY

MAY 7–MAY 11, 2017, BALTIMORE, MARYLAND

- *Co-author with Brodowska K, Mahdi Rostamizadeh R, Weiss D.* Best practices for querying electronic ophthalmology health records for potential clinical trial participants. Poster 1958/ B0462
- *First author, with co-authors Khurana RN, Khanani AM, Ivanhoe RJ, Holcomb RG.* Use of a smart device mobile app for monitoring visual acuity and metamorphopsia in patients with diabetic retinopathy or age-related macular degeneration. Poster 3208/ B0341

MAY 5–MAY 7, 2015, DENVER, COLORADO

- *First author and presenter, with Weichselberger A, Sallstig P.* OSPREY trial: randomized, active-controlled, phase II study to evaluate safety and efficacy of RTH258, a humanized single-chain anti-VEGF antibody fragment, in patients with neovascular AMD. Paper Presentation #4801.
- *Co-author with Shah A, Zanke B.* Prevalence of CFH and ARMS2 genetic polymorphisms in African-American patients with age-related macular degeneration. Abstract / Poster #3786 / C0028.

- *Co-author with Slakter J, Ciulla T, Elman M, Stoller G, Kaiser P, Taraporewala I, Backenroth S.* Final results from a phase 2 study of squalamine lactate ophthalmic solution 0.2% (OHR-102) in the treatment of neovascular age-related macular degeneration (AMD). Paper Presentation #4805.
- MAY 4–MAY 6, 2014, ORLANDO, FLORIDA
- *Co-author with Lee J, Mandiga R, Rao LJ.* Long-term follow-up study on the natural progression of lamellar macular holes. 317 - B0295
- MAY 6–MAY 10, 2012, FT LAUDERDALE, FLORIDA
- *First author, with Himmelman DR, Singerman B, Thomas A, Newman L, Coney JM, Schartman JP, and Novak MA.* Impact of Lucentis on psychological morbidity in patients with macular edema and neovascularization secondary to retinal vein occlusion. Program#/Poster# 5466/A662.
- MAY 1–MAY 5, 2005, FT LAUDERDALE, FLORIDA
- *First author and presenter for the Macugen Diabetic Retinopathy Study Group.* Findings of the Phase 2 Trial of the safety and efficacy of pegaptanib sodium (Macugen™) in patients with diabetic macular edema.
- APRIL 25–APRIL 29, 2004, FT LAUDERDALE, FLORIDA
- *First author and presenter for Rosenfeld PJ and the VALIO Study Group.* Verteporfin with Altered (Delayed) Light In Occult (VALIO) – 12-month results of a Phase II controlled clinical trial.
  - *Co-author with Hudson HL, Martin DF, Berinstein DM, Leonard RE, Heier JS, Dehning DO, Connolly BP, the IMT-002 Study Group.* The Implantable Miniature Telescope in patients with macular degeneration – results of the Phase II/III IMT-002 trial at three months.
- MAY 5–MAY 10, 2002, FT LAUDERDALE, FLORIDA
- *Session Moderator.* Age-related macular degeneration III.
  - *First author and presenter for the EyeTech Study Group.* Anti-VEGF therapy for subfoveal choroidal neovascularization secondary to age-related macular degeneration: phase IB results.
  - *Presenter for Ho AC, the VAM Study Group.* The VAM Study: An open-label, multicenter, safety study of verteporfin therapy for predominantly classic subfoveal choroidal neovascularization (CNV) due to AMD.
  - *Co-author with Slakter JS, Yannuzzi LA, Russell SR, Hudson HL, Jerdan J, Zilliox P, Robertson S, the Anecortave Acetate Group.* Sub-Tenon's administration of the angiostatic agent anecortave acetate in AMD patients with subfoveal choroidal neovascularization (CNV) – the clinical outcome.
- APRIL 29–MAY 4, 2001, FT LAUDERDALE, FLORIDA
- *Co-author with Yannuzzi LA, Russell S, Hudson HL, Jerdan J, the Anecortave Acetate Research Group.* Sub-Tenon's retrobulbar anecortave acetate with and without Visudyne photodynamic therapy in patients with subfoveal choroidal neovascularization in age-related macular degeneration (AMD). (Poster)
  - *Co-author with Maguire MG, Fine SL, Maguire AM, D'Amato RJ, the AMDATS Research Group.* Results of the Age-related Macular Degeneration and Thalidomide Study (AMDATS). (Poster)



- *Co-author with Schwartz SD, Blumenkranz M, Rosenfeld PJ, Miller JW, Haller J, Fish G, Lobes L, Greene WL, Reimann J.* Safety of rhuFabV2, an anti-VEGF antibody fragment, as a single intravitreal injection in subjects with neovascular age-related macular degeneration. (Poster)

APRIL 30–MAY 5, 2000, FT LAUDERDALE, FLORIDA

- *Writing Committee Chair with the TAP Study Group.* Photodynamic therapy of subfoveal choroidal neovascularization in age-related macular degeneration using verteporfin (Visudyne): exploratory analysis of good visual outcomes–TAP report #4.
- *Session Moderator.* Photodynamic therapy II.

MAY 14–MAY 20, 1995, FT LAUDERDALE, FLORIDA

- *Co-author with Lee WW, Wilson D.* New approach on correcting spatial distortion and registration in ophthalmic angiography
- *Co-author with Chokreff JM, Lee WW.* Combination of vessel tracking and image registration in ophthalmic angiography
- *Co-author with Horio B.* An inherited pattern in a family with optic disc pits and iris colobomas
- *Co-author with Alpers JR, Gorla MSR.* Serum carotenoids and age-related macular degeneration

MAY 1–MAY 6, 1994, SARASOTA, FLORIDA

- *Co-author with Quinn TA, Bruner WE, Plantner JJ.* Matrix metalloproteinases of the interphotoreceptor matrix and vitreous
- *Co-author with Cingle KA, Kalski RS, Bruner WE, Kanter L, Yoo SH, Cano DB, Wyszynski RE.* Age-dependent lysosomal enzyme activity of fresh retinal pigment epithelial cells from human eye donors

MAY 2–MAY 7, 1993, SARASOTA, FLORIDA

- *Co-author with Zhou L, Chokreff JM.* High-precision retinal vessel diameter measurement in angiography
- *Co-author with Plantner JJ, Drew TA, Dwyer GJ.* Metalloproteinases of the interphotoreceptor matrix
- *Co-author with Kalski RS, Cano DB, Bruner WE, Wyszynski RE, Kanter L, Yoo SH, Mirando DM, Schloff S.* Serum retinol binding protein and transthyretin levels from patients with age-related macular degeneration
- *Co-author and Principal Investigator with the Macular Photocoagulation Study Group.* Poster: Causes of decreased visual acuity in patients with peripapillary or nasal choroidal neovascularization (CNV) and ocular histoplasmosis (OH) in the Macular Photocoagulation Study (MPS)

MAY 3–MAY 8, 1992, SARASOTA, FLORIDA

- *Moderator, Clinical Research Section.* Macular degeneration of aging
- *Co-author with Cano DB, Schloff S, Mirando DM, Kalski RS, Bruner WF, Wyszynski RE, Castellani WJ.* Serum alpha-mannosidase, albumin, protein and zinc levels from patients with age-related macular degeneration
- *Co-author with SP Bruder, DS Bardenstein.* Monoclonal antibody SB-3 reacts specifically with basement membrane of the retinal pigment epithelium

- *Co-author and Principal Investigator with the Macular Photocoagulation Study Group. Poster: Effect of the variability in photographic quality on a grading scheme of drusen characteristics and retinal pigment epithelium abnormalities*

APRIL 28–APRIL 29, 1991, SARASOTA, FLORIDA

- *Moderator, Retina Section. Macular disease and laser*
- *Co-author with Mirando D, Kalski R, Cano D, Bruner W, Wyszynski R. A decrease in alpha-mannosidase in the serum of patients with age-related macular degeneration and the augmentation of its activity with zinc*
- *Co-author with Lewis ML, Borup M, Elman M. Photocoagulation of pigment epithelial detachments: results of a randomized prospective pilot study*
- *Co-author and Principal Investigator with the Macular Photocoagulation Study Group. Poster: Factors influencing reading ability in patients with choroidal neovascularization*

APRIL 30–MAY 4, 1984, SARASOTA, FLORIDA

- *Red krypton and/or green or blue-green argon laser photocoagulation in treatment of angioid streaks*

MAY 2–11, 1983, SARASOTA, FLORIDA

- *Red krypton laser vs. blue-green argon laser for proliferative diabetic retinopathy with neovascularization of the disc*
- *Co-author with F Ferris. Inexpensive collaborative clinical research*

MAY 1981, SARASOTA, FLORIDA

- *Chairman, Macula Society Exhibit. Current evaluation and management of macular diseases*
  - (the first clinical exhibit ever accepted).

#### *DAVID J KELMAN RESEARCH FOUNDATION*

- *YAG Laser Vitreous Surgery Course: October and December 1982; April, July, and October 1983, February and August 1984; June and December 1985; June 1986*

#### *THE MACULA SOCIETY*

FEBRUARY 21–24, 2018, BEVERLY HILLS, CALIFORNIA

- *Planning Committee, Program Committee, Awards Committee*

JUNE 7-10 2017, SINGAPORE

- *Planning Committee, Program Committee, Awards Committee*
- *Presenter, 2017 Arnall Patz Medal to Dr. Neil M. Bressler*
- *Recipient, First Lawrence J. Singerman Medal for Outstanding Contributions in Clinical Trials*

FEBRUARY 24–27, 2016, MIAMI, FLORIDA

- *Planning Committee, Program Committee, Awards Committee*
- *Panelist, in the Young Member Mentor Lecture, Guidelines for Success as a Successful Academician and Researcher*

- Co-author, The Macula Society Collaborative Retrospective Study of Ocriplasmin for Vitreomacular Traction
- Presenter, 2016 Arnall Patz Medal to Dr. Paul Sternberg Jr

FEBRUARY 25–28, 2015, SCOTTSDALE, ARIZONA

- Planning Committee, Program Committee, Awards Committee
- Co-moderator, Michelson Symposium

FEBRUARY 19–22, 2014, KEY LARGO, FLORIDA

- Planning Committee, Program Committee, Awards Committee

FEBRUARY 27–MARCH 2, 2013, DANA POINT, CALIFORNIA

- Planning Committee, Program Committee, Awards Committee

JUNE 11–15, 2012, JERUSALEM, ISRAEL; 35TH ANNUAL MEETING

- Impact of Lucentis on psychological morbidity in patients with macular edema and neovascularization secondary to retinal vein occlusion
- Planning Committee, Program Committee, Awards Committee

MARCH 9–12, 2011, BOCA RATON, FLORIDA

- Planning Committee, Program Committee, Awards Committee

FEBRUARY 24–27, 2010, TUCSON, ARIZONA

- Planning Committee, Program Committee, Awards Committee

SEPTEMBER 30–OCTOBER 4, 2009, NEW YORK CITY

Retina Congress 2009. Combined Meeting of the American Society of Retina Specialists, The Macula Society, and The Retina Society

- Ranibizumab treatment for pigment epithelial detachment (PED) in age-related macular degeneration (AMD).
- Planning Committee, Program Committee, Awards Committee

MARCH 26–29, 2008, PALM BEACH, FLORIDA

- Planning Committee, Program Committee, Awards Committee

MAY 30–JUNE 2, 2007, LONDON, ENGLAND

- Phase II studies with bevasiranib: overview of the CARE and RACE studies
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 22–25, 2006, NORTH SAN DIEGO, CALIFORNIA

- Two-year systemic safety of pegaptanib sodium in patients with neovascular age-related macular degeneration: results of the V.I.S.I.O.N trials
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 23–26, 2005, KEY BISCAYNE, FLORIDA

- Safety and efficacy of pegaptanib sodium (Macugen™) in patients with diabetic macular edema: results of the Phase 2 trial
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 25–28, 2004, LAS VEGAS, NEVADA

- VEGF inhibition study in ocular neovascularization (VISION): efficacy outcomes from the pivotal Phase II/III Macugen™ (pegaptanib sodium) clinical trials

- Tribute to J. Donald M. Gass, MD; with William F. Mieler, MD; Paul Sternberg, MD; Lawrence A. Yannuzzi, MD; Harry W. Flynn, Jr, MD
- Consultant for Allergan, Novartis, Eyetech, and Pfizer in roundtable panels to plan future clinical trials
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 26–MARCH 1, 2003, NAPLES, FLORIDA

- Four-year results of verteporfin therapy for subfoveal CNV due to AMD: second year of an open-label extension of the TAP investigation
- Planning Committee, Program Committee, Awards Committee

JUNE 12–15, 2002, BARCELONA, SPAIN

- Anti-VEGF therapy for subfoveal choroidal neovascularization secondary to age-related macular degeneration: Phase IB study results
- Planning Committee, Program Committee, Awards Committee, 25<sup>th</sup> Anniversary Meeting

FEBRUARY 28–MARCH 1, 2001, SCOTTSDALE, ARIZONA

- Planning Committee, Program Committee

FEBRUARY 23–26, 2000, RIO GRANDE, PUERTO RICO

- Planning Committee

FEBRUARY 24–27, 1999, SAN DIEGO, CALIFORNIA

- Planning Committee

FEBRUARY 18–21, 1998, BOCA RATON, FLORIDA

- Planning Committee

JUNE 18–22, 1997; 20TH ANNIVERSARY MEETING, FLORENCE, ITALY

- Planning Committee

FEBRUARY 23–26, 1994, RANCHO MIRAGE, CALIFORNIA

- Recurrent choroidal neovascularization: what have we learned from the macular photocoagulation study?
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 24–27, 1993, NAPLES, FLORIDA

- *Moderator*: Retina Vascular II Section
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 26–29, 1992, SCOTTSDALE, ARIZONA

- *Moderator*: Macula Section
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 20–FEBRUARY 23, 1991, ORLANDO, FLORIDA

- Krypton-Argon Regression of Neovascularization Study (KARNS) as a model in ophthalmic clinical research
- Planning Committee, Program Committee, Awards Committee

FEBRUARY 28–MARCH 3, 1990, MAUI, HAWAII

- Ocular involvement in a family with arteriohepatic dysplasia (Alagille's syndrome)
- Planning Committee, Program Committee

JUNE 21–25, 1989, BOSTON, MASSACHUSETTS; COMBINED MEETING WITH THE RETINA SOCIETY

- *Chairman*: Session on choroidal neovascularization
- Tunable dye laser therapy for choroidal neovascularization complicating age-related macular degeneration
- Executive Committee for Combined Meeting

FEBRUARY 24–FEBRUARY 27, 1988, TUCSON, ARIZONA

- Tunable dye laser therapy for choroidal neovascularization
- Planning Committee, Program Committee

JUNE 24–JUNE 27, 1987, CANNES, FRANCE

- Krypton Argon Regression of Neovascularization Study (KARNS)
- Planning Committee, Program Committee

FEBRUARY 26–MARCH 1, 1986, BOCA RATON, FLORIDA

- Multifocal choroiditis-uveitis-subretinal fibrosis spectrum
- Planning Committee, Program Committee

FEBRUARY 27–MARCH 2, 1985, MARATHON, FLORIDA

- YAG laser for vitreous surgery
- Planning Committee, Program Committee

JANUARY 25–28, 1984, SAN DIEGO, CALIFORNIA

- Red krypton and green argon laser photocoagulation of choroidal neovascularization complicating angioid streaks
- Planning Committee, Program Committee

MARCH 1983, ORLANDO, FLORIDA

- Red krypton laser vs. blue-green laser for proliferative diabetic retinopathy
- *Chairman, Macula Society Exhibit*: Evaluation and management of proliferative retinopathies
- Planning Committee, Program Committee

FEBRUARY 1982, MIAMI, FLORIDA

- Spontaneous improvement in the first affected eye of patients with bilateral disciform macular degeneration
- Krypton laser for choroidal neovascularization
- Planning Committee, Program Committee

FEBRUARY 1981, SCOTTSDALE, ARIZONA

- Treatment of SRNV in angioid streaks
- Planning Committee, Program Committee

JANUARY 1980, KEY BISCAYNE, FLORIDA

- Thrombotic thrombocytopenic purpura with ocular findings
- Planning Committee, Program Committee

JANUARY 1978, KEY BISCAYNE, FLORIDA

- Partial treatment of subretinal neovascularization in the histoplasmosis ocular syndrome
- Planning Committee, Program Committee

*WILMER INSTITUTE, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MARYLAND*

APRIL 24–26, 1989

- *Co-author with Maguire MG, et al.* Persistent and recurrent neovascularization after krypton laser photocoagulation for neovascular lesions of ocular histoplasmosis

APRIL 16–18, 1986

- Laser photocoagulation of hemorrhagic pigment epithelial detachment (HPED) with choroidal neovascularization

AUGUST 1–5, 1985; NEW SEABURY, MASSACHUSETTS; RETINAL VASCULAR CENTER 15TH ANNIVERSARY MEETING

- Management of choroidal neovascularization associated with pigment epithelial detachment in patients over 55

APRIL 25–27, 1984

- Krypton versus argon laser treatment of choroidal neovascular membranes in angioid streaks

APRIL 1983

- Evaluation and management of proliferative retinopathies

APRIL 1982

- Krypton laser scatter treatment for proliferative diabetic retinopathy

JULY 1981; BIG SKY, MONTANA; RETINAL VASCULAR CENTER 11TH ANNIVERSARY MEETING

- Prompt aggressive scatter treatment of proliferative diabetic retinopathy

MAY 1981

- Laser treatment of subretinal neovascular membranes in angioid streaks

SEPTEMBER 1980, DIABETIC RETINOPATHY MEETING

- Diabetic retinopathy and pregnancy

JUNE 1980, SUN VALLEY, IDAHO; RETINAL VASCULAR CENTER 10TH ANNIVERSARY MEETING

- PDR in juvenile onset diabetics: high-risk proliferative diabetic retinopathy in juvenile onset diabetics

MAY 1980

- Proliferative diabetic retinopathy in juvenile onset diabetics

APRIL 1979

- Diabetic retinopathy and pregnancy

APRIL 1978

- Protocol for a randomized controlled clinical trial of partial laser histoplasmosis syndrome

APRIL 1976

- Idiopathic papillomacular subretinal neovascularization

APRIL 1975

- Angioid streaks associated with hemochromatosis

APRIL 1974

- Hereditary foveal dystrophy

## SELECTED PRESENTATIONS AT LOCAL, NATIONAL, AND INTERNATIONAL MEETINGS AND SYMPOSIA

Promising new drugs for age-related macular degeneration. Cleveland Ophthalmological Society. Cleveland, Ohio, April 10, 2018.

Moderator, *Diabetes II Symposium*. International Retinal Imaging Symposium (IntRIS) 2018. California NanoSystems Institute at UCLA, Los Angeles, California, February 20, 2018.

*Clinical perspectives on AMD treatments over the past 40 years*. Optometric Retinal Update Seminar. Beachwood, Ohio, February 15, 2018.

Moderator, with Philip J. Rosenfeld, MD, PhD. *Brolucizumab Symposium*. Angiogenesis, Exudation, and Degeneration 2018. Bascom Palmer Eye Institute. Miami, Florida, February 10, 2018.

*Clinical perspectives on our improvements in the management of age-related macular degeneration over the last 40 years*. Keynote Address, 2017 J. Donald M. Gass Award Lecture, 50th Anniversary Meeting of the Retina Society. Boston, Massachusetts, October 5-8, 2017.

*Update on AMD clinical trials*. Optometric Retinal Update Seminar. Beachwood, Ohio, March 28, 2017.

*Brolucizumab vs. aflibercept treatment for neovascular AMD*. Angiogenesis, Exudation, and Degeneration 2017. Bascom Palmer Eye Institute. Miami, Florida, February 11, 2017.

*Macula Society Collaborative Retrospective Study of Ocrlplasmin for Vitreomacular Traction* (with Jennifer I. Lim, Adam R. Glassman, Lloyd Paul Aiello, Usha Chakravarthy, Christina J. Flaxel, Daniel Roth, Richard Spaide, and the Macula Society Ocrlplasmin for Vitreomacular Traction Study Group). Retina Society Annual Meeting. San Diego, California, September 14-17, 2016.

*Promising drugs for treatment of wet AMD*. Optometric Retinal Update Seminar. Cleveland, Ohio, June 16, 2016.

*Macular Degeneration*. Retinal Informational Seminar, hosted by Retina Associates of Cleveland and The Retinal Vascular Foundation. Cleveland, Ohio, June 11, 2016.

- 1) Speaker, *Promising new drugs under investigation for age-related macular degeneration*.
- 2) Symposium co-chair, with Jennifer Kang-Mieler and Chang-hao Yang, *Age-related macular degeneration: pathogenesis, investigation, & epidemiology*. 31st Asia-Pacific Academy of Ophthalmology Congress held in conjunction with the 57<sup>th</sup> Annual Meeting of the Ophthalmological Society of Chinese Taipei. Taipei, March 24–27, 2016.

*Update on anti-VEGF RTH258, DARPin, and other promising drugs for treatment of wet AMD.* Optometric Retinal Update Seminar. Cleveland, Ohio, February 18, 2016.

*Safety and efficacy of RTH258, a single-chain anti-vegf antibody fragment, in patients with neovascular AMD: results from 2 phase II studies.* Angiogenesis, Exudation, and Degeneration 2016. Bascom Palmer Eye Institute. Miami, Florida, February 6, 2016.

*Understanding geographic atrophy disease progression through visual function endpoints: the lampalizumab clinical trial program.* The Retina Society 48th Annual Scientific Meeting. Paris, France, October 7–11, 2015.

*Improved management of diabetic retinopathy based on recent studies from the Diabetic Retinopathy Research Network [DRCRnet].* IX International Meeting IRCCS Fondazione G.B. Bietti, New Diagnostic and Therapeutic Frontiers in Ophthalmology. Rome, Italy, October 2–4, 2015.

*Update on squalamine eye drops, including Phase II study results.* Optometric Retinal Update Seminar. Cleveland, Ohio, June 18, 2015.

1) Speaker, *The role of international societies.* 2) Panel participant, *The role of mentors, of ethics, of culture.* 7th Retina in Progress International Meeting. Florence, Italy, June 11–13, 2015.

Moderator, *Dry AMD Symposium.* International Retinal Imaging Symposium 2015 (IRIS III). UCLA Medical Center, Los Angeles, California, March 28, 2015.

*Phase 3 study of lampalizumab for geographic atrophy.* Optometric Retinal Update Seminar. Cleveland, Ohio, March 12, 2015.

*Update on squalamine eye drops for neovascular AMD.* Angiogenesis, Exudation, and Degeneration 2015. Bascom Palmer Eye Institute. Miami, Florida, February 7, 2015.

Co-moderator, with Peter Kaiser, MD. Cleveland Ophthalmological Society Diabetes Symposium. Cleveland, Ohio, October 14, 2014.

1) *Gap between BCVA and low-luminance VA at baseline predicts treatment response to ranibizumab at year 2 of the HARBOR Study* (with Ronald Frenkel, MD [first author]; Howard Shapiro, PhD; and Ivo Stoilov, MD). 2) Presenter, J. Donald M. Gass Award, to Alexander J. Brucker, MD. Retina Society 47<sup>th</sup> Annual Meeting. Philadelphia, Pennsylvania, September 11-14, 2014.

Moderator, Pharmacology Session. American Society of Retina Specialists (ASRS) 32<sup>nd</sup> Annual Meeting. San Diego, California, August 9-13, 2014.

*Catching choroidal neovascularization (CNV) ASAP.* Optometric Retinal Update Seminar. Cleveland, Ohio, June 26, 2014.



1) *Genetic testing for AMD and associated anti-oxidant/zinc recommendations*; 2) *Dealing with non-responsive or sub-responsive nAMD*; 3) *AMD and myopic CNV clinical cases*; 4) *Imaging Course, OCT and autofluorescence features in AMD*. European School for Advanced Studies in Ophthalmology. Medical Retina. Lugano, Switzerland, June 2-6, 2014.

1) *Utility of genetic testing for retinal diseases*. 2) *Advances in the management of neovascular AMD*. Seventh Annual Retina Symposium: An Evidence-based Approach to Current Management of Retinal Conditions. Illinois Eye and Ear Infirmary, University of Illinois at Chicago. Chicago. Illinois, April 11, 2014.

*Medical control of diabetic retinopathy*. Macula Society and the National Eye Institute/National Institutes of Health Session: Advances in Therapies for Diabetic Retinopathy. 2014 World Ophthalmology Congress of the International Council of Ophthalmology. Tokyo, Japan, April 4, 2014.

*Perspectives in the management of macular degeneration*. Optometric Retinal Update Seminar. Beachwood, Ohio, March 20, 2014.

*Current management of macular degeneration*. Medical Lecture Series, Ocean Reef Club. Key Largo, Florida, February 18, 2014.

*Update on treatment with squalamine eye drops*. Angiogenesis, Exudation, and Degeneration 2014. Bascom Palmer Eye Institute. Miami, Florida, February 8, 2014.

*Clinical perspectives in the management of age-related macular degeneration*. Ronald G. Michels Memorial Lecture. Johns Hopkins 26th Annual Current Concepts in Ophthalmology. Baltimore, Maryland, December 6, 2013.

*The importance of and advances in the early detection of the progression of dry macular degeneration to wet*. SupportSight Seminar. Cleveland, Ohio, October 22, 2013.

*Genetic analysis increases the predictive accuracy of progression from early to advanced AMD*. American Society of Retina Specialists Annual Meeting. Toronto, Ontario, Canada, August 24–28, 2013.

*Advances in age-related macular degeneration treatment*. Optometric Retinal Update Seminar. Westlake, Ohio, June 18, 2013.

*Advances in age-related macular degeneration treatment*. Braley Lecture, Iowa Eye Association Annual Meeting. Iowa City, Iowa, June 14-15, 2013.

*Case presentation*. Cleveland Clinic North Coast Retina Symposium IV. Cleveland, Ohio, May 17–18, 2013

*Update on age-related macular degeneration treatment trials*. Optometric Retinal Update Seminar. Beachwood, Ohio, March 14, 2013.

*Topical squalamine for wet AMD. Angiogenesis, Exudation, and Degeneration 2013.* Bascom Palmer Eye Institute. Miami, Florida, February 9, 2013.

1) *Update on AMD treatment trials*, Grand Rounds Lecture. 2) *Topical squalamine for wet AMD*, Noontime Lecture Scheie Eye Institute, Philadelphia, Pennsylvania, February 7, 2013.

Opening speaker, *Retina Round Table: The best case of my life.* Advanced Retinal Therapy Congress, Past—Present—Perspectives in Ophthalmology. Vienna, Austria, December 1, 2012.

1) Panel discussant, *Applications and limitations of clinical genetic testing for AMD.* Macula Risk Symposium, *Personalized Medicine in the Management of AMD.* 2) Co-moderator, *AMD III symposium.* 3) Discussion co-leader, Special Interest Groups Lunch Table Discussion, *Retinal vein occlusions: the role of laser, steroids & anti-VEGF therapy: how I decide what & when.* American Society of Retina Specialists Annual Meeting. Las Vegas, Nevada, August 25-29, 2012.

*Impact of Lucentis on psychological morbidity in patients with retinal vein occlusion.* Optometric Retinal Update Seminar. Westlake, Ohio, June 5, 2012.

*Laser treatments and research for macular degeneration.* Macula Vision Research Foundation SupportSight Seminar. Independence, Ohio, May 12, 2012.

*Macula Society collaborative on-line study of treatment for chronic serous chorioretinopathy.* Joint Asia Pacific Academy of Ophthalmology Congress / European Society of Ophthalmology Congress / Korean Ophthalmological Society Congress. Busan, Korea, April 13, 2012.

*Macula Society collaborative research project on central serous retinopathy treatment with photodynamic therapy.* Optometric Retinal Update Seminar. Beachwood, Ohio, March 15, 2012.

*Treatment of geographic atrophy.* Optometric Retinal Update Seminar. Youngstown, Ohio, September 1, 2011.

*The Macula Society: Its unique place in an era of three retina societies.* New Horizons in Retina. 41st Anniversary: The Wilmer Eye Institute Retina Division. Teton Springs Lodge, Victor, Idaho. June 30, 2011.

*Treatment of geographic atrophy.* Optometric Retinal Update Seminar. Westlake, Ohio, June 28, 2011.

*Macular edema from vein occlusion – response to Ozurdex after anti-VEGF failure.* North Coast Retina Symposium. Cole Eye Institute, Cleveland Clinic Foundation. May 13, 2011.

*Progress in the management of age-related macular degeneration.* Keynote speaker, Cleveland Ophthalmic Personnel Society Annual Brunch. Cleveland, Ohio, April 3, 2011.

*Treatment of geographic atrophy.* Optometric Retinal Update Seminar. Beachwood, Ohio, March 3, 2011.

*Visual cycle inhibitors for dry AMD.* Angiogenesis, Exudation and Degeneration 2011. Bascom Palmer Eye Institute. Miami, Florida, February 12, 2011.

*Clinical trials of treatment of dry AMD.* Cleveland Ophthalmological Society. Cleveland, Ohio, October 12, 2010.

*Ozurdex for macular edema (and comments about the Implantable Miniature Telescope).* Optometric Retinal Update Seminar. Westlake, Ohio, August 19, 2010.

*Update on wet age-related macular degeneration management.* Case Western Reserve University 28th Annual Update for the Comprehensive Ophthalmologist Conference. Cleveland, Ohio, April 23, 2010.

*Recent advances in the treatment of exudative macular degeneration.* Optometric Retinal Update Seminar. Beachwood, Ohio, March 25, 2010.

*Visual cycle inhibitors.* Angiogenesis 2010: Clinical Trials. Bascom Palmer Eye Institute. Miami, Florida, February 20, 2010.

*Pharmacotherapy for AMD.* Retinal Update for Ophthalmologists. Beachwood, Ohio, May 13, 2009.

*Current treatment of diabetic retinopathy.* Guest speaker, Dietrich Diabetes Research Institute and Endocrinology Club Joint Meeting, Diabetes Association of Greater Cleveland. Cleveland, Ohio, March 12, 2009.

1) *Incorporating clinical trials in a private retinal practice.* 2) *Future pharmacotherapy for AMD.* 3) *Current treatment of diabetic retinopathy.* Pittsburgh Ophthalmology Society 45<sup>th</sup> Annual Meeting. Pittsburgh, Pennsylvania, March 6, 2009.

Co-moderator, *Retina.* Speaker, *Advances in the management of dry AMD.* Cleveland Ophthalmological Society. Cleveland, Ohio, February 10, 2009.

1) *Treatment of geographic atrophy: medical treatments under investigation.* 2) *Diabetic macular edema: results of randomized clinical trials.* Macula of Paris. Paris, France, January 23, 2009.

Moderator, *Dry AMD Symposium.* Macula 2009. New York, New York, January 16–17, 2009.

1) *Classification of AMD.* 2) *Pigment epithelial detachment, polypoidal choroidal vasculopathy, and retinal angiomatous proliferation.* 3) *Future therapies.* Advances in Age-related Macular Degeneration. University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania, October 3–4, 2008.

1) *Next generation targets for AMD Therapy: beyond VEGF inhibitors.* 2) Macula Society Symposium Speaker, *Bevasiranib for AMD.* 3) Macula Society Symposium Co-chair, with Wai-Man Chan, MD, and Alexander J. Brucker, MD. World Ophthalmology Congress. Hong Kong, June 28–July 2, 2008.

*New treatments for age-related macular degeneration.* Yonsei Retina Symposium. Seoul, South Korea, June 25, 2008.

1) *Current advances in the treatment of age-related macular degeneration.* Melvin L. Rubin Lecture. 2) *Case presentation: endogenous Nocardia chorioretinitis in an immunocompetent patient.* Florida Society of Ophthalmology. Palm Beach, Florida, June 21–22, 2008.

*Bevasiranib.* Combination Therapy for AMD Symposium. Philadelphia, Pennsylvania, June 6, 2008.

1) *Bevasiranib.* 2) *Fenretinide for geographic atrophy.* 3) *Pegaptanib sodium injection in a ranibizumab world.* Retinal Physician Symposium. Naples, Florida, May 28–31, 2008.

*Pharmacological management of diabetic eye disease.* Cleveland Ophthalmological Society Meeting. Cleveland, Ohio, April 8, 2008.

*Bevasiranib update.* Bascom Palmer Eye Institute Angiogenesis, Exudation, and Degeneration 2008. Key Biscayne, Florida, February 22–23, 2008.

*New drugs under investigation for wet and dry age-related macular degeneration.* Optometric Retinal Update Seminar. Cleveland, Ohio, February 21, 2008.

1) *Pharmacotherapy of diabetic retinopathy.* 2) *New treatments for macular degeneration.* Ohio Ophthalmological Society Annual Meeting. Columbus, Ohio, January 26, 2008.

*Management of age-related macular degeneration – Parts 1 and 2.* Current Concepts in Ophthalmology 2008, sponsored by SUNY Downstate Medical Center, Department of Ophthalmology. Atlantic City, New Jersey, January 12, 2008.

*Intravitreal bevasiranib in exudative age-related macular degeneration or diabetic macular edema.* 25<sup>th</sup> Annual Meeting of the American Society of Retina Specialists. Indian Wells, California, December 3, 2007.

*Bevasiranib for treatment of age-related macular degeneration (AMD) and diabetic macular edema (DME).* Retina Society Annual Meeting. Boston, Massachusetts, September 28, 2007.

*Update on Lucentis therapy for age-related macular degeneration.* Optometric Retinal Update Seminar. Westlake, Ohio, July 17, 2007.

*Safety and efficacy of the Anti-VEGF small interfering RNA bevasiranib administered intravitreally in subjects with exudative age-related macular degeneration (AMD) or diabetic macular edema (DME).* Case Department of Ophthalmology 13th Annual Faculty, Resident, & Alumni Research Day. Cleveland, Ohio, June 15, 2007.

*Review of Phase II Studies with bevasiranib: the CARE and RACE Studies.* Clinical Study Team Investigator Meeting, Opko Health (Acuity Pharmaceuticals). Denver, Colorado, June 9–10, 2007.

*Current therapy for diabetic retinopathy.* Association of Indian Physicians of Northeast Ohio. Hillcrest Hospital, Mayfield Hts, Ohio, April 28, 2007.

*Macular degeneration – newest information on research and treatments.* Macula Vision Research Foundation SupportSight Seminar. Middleburg Hts, Ohio, March 24, 2007.

*Pegaptanib (Macugen) therapy for diabetic retinopathy and central retinal vein occlusion.* Angiogenesis 2007, Bascom Palmer Eye Institute. Miami, Florida, February 23–24, 2007.

*Pharmacotherapy of diabetic retinopathy.* Optometric Retinal Update Seminar. Beachwood, Ohio, February 15, 2007.

1) *Update on Lucentis and small interfering RNA (siRNA) for the treatment of neovascular age-related macular degeneration.* 2) *Introduction to new retinal technology* (with ZN Zakov, MD). Optometric Retinal Update Seminar. Youngstown, Ohio, September 28, 2006.

*Update on Lucentis and small interfering RNA (siRNA) for the treatment of neovascular age-related macular degeneration.* Optometric Retinal Update Seminar. Cleveland, Ohio, September 25, 2006.

Speaker, *VEGF small interfering (si) RNA for treatment of wet age-related macular degeneration (AMD).* Presiding Officer, *Symposium II: Anti-Angiogenesis (Part 2).* Annual meeting of the American Society of Retina Specialists. Cannes, France, September 8–13, 2006.

*Summarizing the treatments for AMD.* Mediterranean Retina II Meeting. Antalya, Turkey, June 23–25, 2006.

1) *Update on Lucentis.* 2) *Small interfering RNA treatment for AMD with CNV.*

*Newest research and treatments for macular degeneration.* Seminar on Age-related Macular Degeneration, in conjunction with Macula Vision Research Foundation SupportSight. Solon, Ohio, June 3, 2006.

*Pharmacotherapy for age-related macular degeneration,* Ophthalmology Grand Rounds. *Laser therapy for posterior segment disease,* Lecture. Case Western Reserve University/University Hospitals of Cleveland. Cleveland, Ohio, March 29, 2006.

*Clinical trials in private practice. Mentoring in Ophthalmology Vitreoretinal Fellows Program, Annenberg Center for Health Sciences. Rancho Mirage, California. March 3, 2006.*

*Lucentis and Avastin for choroidal neovascularization in age-related macular degeneration. Optometric Retinal Update Seminar. Cleveland, Ohio, February 9, 2006.*

*Macugen for neovascular age-related macular degeneration. Angiogenesis 2006, Bascom Palmer Eye Institute. Miami, Florida, February 4, 2006.*

*Moderator, Medical retinal diseases. Speaker, Avastin; Discussion on neovascular AMD: what-when-how to treat. Macula 2006 and Atlantic Coast Retina Club. New York, New York, January 13–14, 2006.*

*Complications of intravitreal injections. Cleveland Ophthalmological Society Meeting. Cleveland, Ohio, October 11, 2005.*

*Recent Advances in Treatment of age-related macular degeneration. Optometric Retinal Update Seminar. Cleveland, Ohio, September 14, 2005.*

*Diabetic retinopathy and other retinal disorders. Department of Family Practice CME Conference. Hillcrest Hospital, Cleveland, Ohio, July 27, 2005.*

*Speaker, 1) Anti VEGF therapy for macular edema, 2) Anti VEGF therapy for AMD. Co-chair, with Ursula Schmidt-Erfurth, Session on Age-related Macular Degeneration. EURETINA 2005, 5<sup>th</sup> Euretina Congress. Milan, Italy, May 19–21, 2005.*

*Posterior juxtasclear depot: critical steps in managing reflux. Posterior Juxtasclear Depot: Emerging AMD Therapies and Administration Techniques. Cleveland, Ohio, April 29, 2005.*

*New treatments for diabetic macular edema. Optometric Retinal Update Seminar. Cleveland, Ohio, February 15, 2005.*

*Co-author, with Barrett Katz, for the Macugen Diabetic Retinopathy Study Group. A Phase 2 clinical trial of the safety and efficacy of pegaptanib sodium (Macugen™) for treatment of diabetic macular edema. Poster displayed at the seventh annual meeting of the Association for Ocular Pharmacology and Therapeutics (AOPT). Catania, Sicily, Italy, February 3–5, 2005.*

*Advances in management of neovascular age-related macular degeneration. Cleveland, Ohio, January 20, 2005.*

*VEGF and its role in AMD: implications for therapeutics. Continuing Medical Education Dinner Meeting. Rosemont, Illinois, January 19, 2005.*

*Participant, Retina Expert Meeting. New York, New York, December 17–19, 2004.*

*Participant, Optical Coherence Tomography Research Meeting, sponsored by Carl Zeiss Meditec. Miami, Florida, December 11–12, 2004.*

*Intravitreal triamcinolone injection / vascular endothelial growth factor.* Advances in the Management of Neovascular Age-related Macular Degeneration, Continuing Medical Education Regional Meeting. Chicago, Illinois, November 17, 2004.

*Controversies in the treatment of age-related macular degeneration.* Guest of Honor, New England Ophthalmological Society Meeting. Boston, Massachusetts, October 15, 2004.

*Anti-vascular endothelial growth factor (VEGF) aptamer (Macugen) for diabetic macular edema.* Angiogenesis and its Inhibition, University of Pittsburgh, Pittsburgh, Pennsylvania, October 8–9, 2004.

*Unusual cases.* Optometric Retinal Update. Youngstown, Ohio, October 6, 2004.

*Clinical outcomes of the Patient InSight Registry: 2004.* Twenty-fourth Meeting of the Club Jules Gonin. Athens, Greece, September 8–12, 2004.

*The Heidelberg retina angiograph 2.* Optometric Retinal Update. Cleveland, Ohio, July 29, 2004.

*New treatments for age-related macular degeneration.* Tenth Annual Faculty, Resident, & Alumni Research Day, Case Department of Ophthalmology, Case School of Medicine. Cleveland, Ohio, June 18, 2004.

*VEGF Inhibition Study in Ocular Neovascularization (VISION): efficacy outcomes from the Macugen clinical trials.* Fourth Euretina Congress, Milan, Italy, May 13–15, 2004.

Chair, Retina Section. Speaker, *Pharmacotherapy of diabetic retinopathy.* Ohio Ophthalmological Society Annual Meeting. Columbus, Ohio, March 20, 2004.

*Phase III results of Macugen for CNV in AMD.* Cleveland Ophthalmological Society Meeting. Cleveland, Ohio, February 10, 2004.

*Anti-VEGF aptamer (Macugen) for diabetic macular edema.* Bascom Palmer Eye Institute's Angiogenesis 2004. Coral Gables, Florida, February 6, 2004.

*Advances in treatment of age-related macular degeneration.* East West Eye Conference. Cleveland, Ohio, October 25, 2003.

*Current approaches in photodynamic therapy.* Pilkerton Lecturer, the Retina Group of Washington. Washington DC, October 18, 2003.

*Pharmacological treatment for diabetic retinopathy.* Schupf Invitational Symposium, Lighthouse International. New York, New York, October 17, 2003.

*Macular degenerative disease.* Community Leadership Council Meeting. Hillcrest Hospital, Cleveland, Ohio, October 14, 2003.

*Newer findings in photodynamic therapy clinical trials.* Optometric Retinal Update. Cleveland, Ohio, August 12, 2003.

Symposium Moderator, *Dynamic ICG angiography (DICGA): diagnostics.* Speaker, *Perspectives on MPS grading of choroidal neovascular lesions.* Second Annual Heidelberg Retina Angiograph (HRA) Symposium. San Diego, California, June 27–29, 2003.

Section Chairman, *Age-related macular degeneration.* Speaker, *Four-year results of PDT in AMD.* Speaker, *Anecortave acetate.* Retina in Progress. Milan, Italy, June 19–21, 2003.

1) *Predictive value of lesion size and outcome on vision benefits.* 2) *Multicourse therapy.* 3) *Beyond visual acuity: contrast sensitivity.* 4) *Alternative treatment strategies: anecortave acetate overview.* AMD Management: PDT Applications and the Role of Emerging Therapies. Chicago, Illinois, May 31, 2003.

*Clinical trials in age-related macular degeneration.* Dayton Vitreo-Retinal Consultants, Dayton, Ohio, May 14, 2003.

*An overview of the treatment of age-related macular degeneration from the macular photocoagulation studies to the present.* Conference, Age-related Macular Degeneration: Current Approaches to Diagnosis and Treatment. Inova Institute of Research and Education. Fairfax, Virginia, May 10, 2003.

*Advances in treatment of age-related macular degeneration.* Optometric Retinal Update. Cleveland, Ohio, February 20, 2003.

*Update on diabetic retinopathy.* Grand Rounds, Hillcrest Hospital. Cleveland, Ohio, January 22, 2003.

Section Moderator, *Macula 2003: advances in diagnosis and treatment.* New York, New York, January 18, 2003.

*Two-year results of an open-label extension of the TAP investigation evaluating verteporfin therapy for subfoveal CNV due to AMD.* Retina Congress 2002 (The 20th Annual Vitreous Society and The 35th Annual Retina Society Meeting). San Francisco, California, September 28–October 2, 2002.

*Anti-VEGF therapy for exudative AMD.* Eleventh Annual Ocular Surgery News Symposium. New York, New York, September 21, 2002.



Course Chair, *Practical decision making for the patient with age-related macular degeneration*. Symposium Chair, *Age-related macular degeneration: pathogenesis, risk factors and prevention*. Symposium Speaker, *Experimental treatment: results of PDT in the VIP trial* (Symposium: Current Nonsurgical Management of Exudative Age-related Macular Degeneration; Gisele Soubrane, Chair). Symposium Speaker, *Parafoveal telangiectasia* (Symposium: Unusual Retinal Disorders; Alexander Brucker, Chair). Symposium Speaker, *Optimal clinical utilisation of digital fluorescein angiography and photography* (Symposium: Diagnostic Methods in Macular Disease: New Insights in Angiography, Ocular Coherence, Tomography and Ultrasound; Gabriel Coscas, Chair). XXIX<sup>th</sup> International Congress of Ophthalmology. Sydney, Australia, April 22–25, 2002.

Second Annual Applications of Verteporfin Therapy Seminar. Phoenix, Arizona, February 28– March 2, 2002.

*Advances in treatment of age-related macular degeneration*. Optometric Retinal Update. Cleveland, Ohio, February 26, 2002.

*New treatments for age-related macular degeneration*. Buffalo Ophthalmological Society. Buffalo, New York, November 1, 2001.

*Advances in treatment of age-related macular degeneration*. Optometric Retinal Update. Youngstown, Ohio, August 29, 2001.

*Antiangiogenic agents for treatment of choroidal neovascularization in age-related macular degeneration*. CWRU Department of Ophthalmology Seventh Annual Faculty, Resident, & Alumni Research Day. Cleveland, Ohio, June 18, 2001.

*Antiangiogenic agents for treatment of choroidal neovascularization in age-related macular degeneration*. Cleveland Ophthalmological Society. Cleveland, Ohio, June 15, 2001.

1) *Macular Photocoagulation Studies*. (Symposium: What is New in Age-related Macular Degeneration?) 2) *Photodynamic therapy in subfoveal CNV*. (Symposium: Myopic CNV.) XIII Congress of the European Council of Ophthalmology. Istanbul, Turkey, June 10, 2001.

*Update on photodynamic therapy (with Visudyne)*. Cleveland Ophthalmological Society. Cleveland, Ohio, April 10, 2001.

*The Krypton Argon Regression of Neovascularization Study*. Randomized Clinical Trials in Ophthalmology: A Symposium to Celebrate the 25th Anniversary of the First Publication from the Diabetic Retinopathy Study and The 30-year History of Sponsorship of Multicenter Randomized Trials by the National Eye Institute. Baltimore, Maryland, The Johns Hopkins Center for Clinical Trials and The Wilmer Ophthalmological Institute, April 2–3, 2001.

*Results from multicenter trials: how did they change knowledge and therapy of diabetic retinopathy? The Diabetes Control and Complications Trial*. DR 2000, International Forum on Diabetic Retinopathy. Naples, Italy, September 7–9, 2000.

1) *Management of choroidal neovascularization from causes other than macular degeneration*; 2) *Laser photocoagulation of patients with macular degeneration*. Ophthalmology 2000: Lasers for the General Ophthalmologist in the New Millennium. Brooklyn, New York, June 15, 2000.

Speaker, *Choroidal changes in central serous chorioretinopathy and age-related macular degeneration*. Session Co-chairman, *Diabetic retinopathy*. Session Co-chairman, VI<sup>th</sup> Michaelson Symposium on Ocular Circulation and Neovascularization. VI<sup>th</sup> Mediterranean Ophthalmological Society Congress. Jerusalem, Israel, May 21–26, 2000.

1) *Update on photodynamic therapy*; 2) *Other treatments for age-related macular degeneration*; 3) *Other causes of choroidal neovascularization*. Current Subjects in Retina, Congress of the Institution of Ocular Microsurgery of the Autonomous University of Barcelona. Barcelona, Spain, May 18–19, 2000.

*Basics of macular degeneration & photodynamic therapy for age-related macular degeneration*. Bombay Ophthalmologists Association Meeting. Mumbai, India, March 29, 2000.

*Photodynamic therapy: overtreatment is traumatic, case selection is critical*. Cleveland Ophthalmological Society. Cleveland, Ohio, February 15, 2000.

Discussant, *Age-related macular degeneration symposium: medical treatment (prophylactic drusen treatment, antivasogenic drugs, transpupillary thermotherapy, radiation therapy, feeder vessel technique, photodynamic therapy)*. Section Moderator and Case Presenter. Macula 2000: Atlantic Coastal Retinal Meeting. New York, New York, January 14–15, 2000.

Speaker, *One-year angiographic outcomes following verteporfin therapy for subfoveal choroidal neovascularization in age-related macular degeneration: results of 2 randomized clinical trials*. Panelist, *Controversies from the first annual Vitreous Society 'Preferences and Trends' (PAT) Survey*. Vitreous Society 17<sup>th</sup> Annual Meeting. Rome, Italy, September 21–25, 1999.

1) *Laser treatment of venous retinal occlusion*; 2) *Angiography in retinal vein occlusion*. XII Congress of the European Society of Ophthalmology. Stockholm, Sweden, June 27–July 1, 1999.

*Unusual placoid lesions*. Cleveland Ophthalmological Society. Cleveland, Ohio, December 15, 1998.

*Formes exsudatives associées de DMLA avec néovascularization choroïdienne occulte et bien définie (classic)*. (*Exudative forms associated with occult and well-defined (classic) choroidal neovascularization*.) III<sup>e</sup> Symposium International de Créteil: La DMLA en 1998: le Present, le Futur. Paris, France, November 20–21, 1998.

Moderator, *Fluorescein angiography and interesting cases conference*. The Retina Society, Thirty-first Annual Scientific Session. Washington, DC, September 24–27, 1998.

Chairman, *Symposium on cystoid macular edema (Macula Society)*. Speaker, *Macular edema in central retinal vein occlusion*. Twenty-eighth International Congress of Ophthalmology. Amsterdam, The Netherlands, June 21–26, 1998.

1) *Management of diabetic retinopathy: laser and medical treatments*. 2) *Laser treatment of choroidal neovascularization*. Second Annual Meeting of the Georgia Society of Ophthalmology and the Tennessee Academy of Ophthalmology. Amelia Island, June 11–14, 1998.

1) *Central retinal vein occlusion*; 2) *Ocular coherence tomography*. Midwest Eye Spring Update Course. Indianapolis, Indiana, May 15, 1998.

1) *Less common causes of choroidal neovascularization*. 2) *Results of laser treatment for recurrent CNV in AMD are better than most ophthalmologists realize*. 3) *Diabetic retinopathy: medical considerations*. 4) *Laser treatment for proliferative diabetic retinopathy*. 5) *Ocular coherence tomography (OCT)*. 6) *Central retinal vein occlusion*. Round Table Moderator, Management of Macular Degeneration. New Orleans Academy of Ophthalmology, Symposium on Vitreoretinal and Uveitis Update. New Orleans, April 3–5, 1998.

Ophthalmic Director, Retina Session. Speaker, 1) *Age-related macular degeneration*. 2) *Less common causes of choroidal neovascularization*. 3) *Central retinal vein occlusion*. 4) *Optical coherence tomography*. Island Ophthalmology Seminar '98. St. Thomas, US Virgin Islands, February 28–March 6, 1998.

1) *Central retinal vein occlusion study*. 2) *Unusual causes of choroidal neovascularization*. Retina Update '98. Phillips Eye Institute, Minneapolis, Minnesota, January 24, 1998.

*Ocular manifestations of systemic diseases / Ocular inflammatory syndromes / Spots and dots*. Fifteenth Annual Retinal Disease Update. Innovative Images and Imaging. Department of Ophthalmology, Case Western Reserve University School of Medicine, Cleveland, Ohio, April 25, 1997.

1) *Central Vein Occlusion Studies*. 2) *Less common causes of choroidal neovascularization*. 3) *New studies of age-related macular degeneration*. Guest Speaker, Chicago Ophthalmological Society, 49th Annual Clinical Conference. Chicago, Illinois, April 24, 1997.

*Diabetes and retinopathy*. Diabetes Association of Greater Cleveland, 1997 Allied Health Professionals Symposium, How Complicated Can Diabetes Get? Cleveland, Ohio, March 19, 1997.

*Age-related macular degeneration*. Retina-Vitreous Didactic Lecture Series. University Hospitals of Cleveland, Cleveland, Ohio, March 12, 1997.

*Retinal and choroidal manifestations of systemic disease*. Grand Rounds, Mt. Sinai Medical Center. Cleveland, Ohio, December 11, 1996.

*Ocular fundus manifestations of systemic disease.* Summit County Optometric Society Winter Conference. Akron, Ohio, December 4, 1996.

*CNV studies.* University of Milan, Scientific Institute. Milan, Italy. September 10, 1996.

*Age-related macular degeneration: for the patient and family.* Mt. Sinai Medical Center, Wellness Wednesday Programs. Cleveland, Ohio, August 31, 1994; December 6, 1995; July 10, 1996.

*Your eyes and diabetes: a look at diabetic retinopathy.* Mt. Sinai Medical Center, Wellness Wednesday Programs. Cleveland, Ohio, May 17, 1995.

*AMD laser results may now be better than perceived.* First Jerusalem International Congress on Retinal and Vitreous Diseases. Jerusalem, Israel, June 30–July 6, 1996.

*Update of the results of the central vein occlusion studies to date.* Case Western Reserve University Department of Ophthalmology, 1996 Second Annual Faculty, Resident, and Alumni Research Day. Cleveland, Ohio, June 21, 1996.

*Advances in the diagnosis and treatment of retinal diseases.* Ohio Optometric Association, June 19, 1996.

*Update of the results of the Central Vein Occlusion Studies.* Grand Rounds, St. Luke's Hospital Department of Ophthalmology, June 7, 1996.

*Diagnosis and treatment of retinal diseases.* Summit County Optometric Society Spring Conference. March 19, 1996.

*Less common causes of choroidal neovascularization.* Palm Beach County Ophthalmology Society. West Palm Beach, Florida, February 6, 1996.

*Vascularized pigment epithelial detachment.* X<sup>th</sup> Congress European Society of Ophthalmology. Milan, Italy, June 25–29, 1995.

*New developments in the diagnosis and treatment of retinal vascular diseases.* University of Louisville, Department of Ophthalmology & Visual Sciences, Louisville, Kentucky, May 17–18, 1995.

*Multifocal choroiditis.* Cleveland Ophthalmological Society. Cleveland, Ohio, February 7, 1995.

Panel Discussions, 1) *Age-related macular degeneration.* 2) *Vitreoretinal interfaces.* 3) *AIDS and other retinal inflammations.* San Francisco, California, October 28–29, 1994.

*Update of the Macular Photocoagulation Study.* Macula: New Frontiers - An International Symposium. Kansas City, Missouri, June 23–25, 1994.

*Angioid and choroidal rupture with neovascularization.* Fluorescein Angiography for the General Ophthalmologist. Scheie Eye Institute, University of Pennsylvania, Philadelphia, Pennsylvania, May 7, 1994.

*Management of choroidal neovascularization not evaluated by clinical trials.* Wilmer Ophthalmological Institute, January 1994.

*Beyond the DCCT: management of diabetic retinopathy in insulin-dependent diabetes mellitus.* Diabetes Association of Greater Cleveland, November 1993.

Program Chairman. Speaker, *Indocyanine green angiography.* Ohio Ophthalmological Society. Cleveland, Ohio, June 4–5, 1993.

*Management of proliferative diabetic retinopathy with vitreous hemorrhage.* Guest Faculty Comprehensive Course in Diabetic Retinopathy. Scheie Eye Institute, University of Pennsylvania, Philadelphia, Pennsylvania, May 22, 1993.

*New findings from the Macular Photocoagulation Study.* Cleveland Ophthalmological Society. Cleveland, Ohio, April 13, 1993.

Moderator, *Indocyanine green angiography (ICG) Symposium.* Manhattan Eye, Ear and Throat Hospital, New York, New York, January 15–16, 1993.

*Results of the randomized, controlled recurrent subfoveal choroidal neovascularization study.* The Vitreoretinal Frontier. Dallas, Texas, November 6–7, 1992.

*Optimal management of diabetic retinopathy.* Clinical Day jointly sponsored by Long Island Jewish Medical Center and North Shore University Hospital/Cornell University Medical College, October 14, 1992.

*Best cases for laser therapy for subfoveal neovascularization.* Cleveland Ophthalmological Society. Cleveland, Ohio, October 13, 1992.

*Unusual case presentations.* Invited Presenter, The Retina Society. September 23–26, 1992, New York, New York.

*Management of pigment epithelial detachments.* Angiofluoresceina Ocular y Laser en Oftalmologia. Guest of Honor, Grupo Latino Americano de Angiografia Ocular y Fotocoagulacion. Cancun, Mexico, July 16–18, 1992.

*Retinopathy.* No-Nonsense Diabetes Management Symposium. Diabetes Association of Greater Cleveland and Case Western Reserve University School of Medicine, Cleveland, Ohio, June 3, 1992.

1) *Management of pigment epithelial detachment.* 2) *Glycosidases in human ocular disease: age-related macular degeneration*, with WE Bruner, RS Kalski, DB Cano, DM Mirando, S Schloff, SH Yoo, RE Wyszynski, KM Morgan, HE Grossniklaus, WJ Castellani. Department of Ophthalmology Faculty and Alumni Symposium: Celebration in Honor of the New Department of Ophthalmology and Edward W. Purnell, MD. Case Western Reserve University School of Medicine, Cleveland, Ohio, May 29, 1992.

Session Moderator, *Age-related macular degeneration. Poster, Automated detection and quantification of retinopathy in digital fluorescein angiograms by an adaptive method.* Third International Symposium on Ocular Circulation and Neovascularization. Paris, France, May 21–24, 1992.

1) *Complications of laser photocoagulation;* 2) *Evaluation and management of subfoveal choroidal neovascularization in age-related macular degeneration.* Management of Retinal Vascular and Macular Disorders. The Center for Advanced Eye Surgery at Humana Hospital-Lexington, Lexington, Kentucky, May 15–16, 1992.

*Lysosomal enzymes in the retinal pigment epithelium of patients with age-related macular degeneration* (poster). Co-author; research advisor of Sonia Yoo, first author and recipient of the Dean's Prize for this project at the Irwin H. Lepow Student Research Day at Case Western Reserve University, May 11, 1992.

*Retinal manifestations of selected systemic diseases.* Case Western Reserve University School of Medicine Alumni Program, The Diagnostic Detective: Perplexing Patient Problems. Cleveland, Ohio, April 10, 1992.

*Photocoagulation management of subfoveal choroidal neovascularization.* Invited Faculty Member, Controversial Management Decisions in Vitreo-Retinal Disorders, Macular Holes and Submacular Membranes. Wills Eye Hospital Annual Meeting. Philadelphia, Pennsylvania, April 4, 1992.

*Retinal pigment epithelium detachment.* Invited Faculty Member, Third Anniversary of the Retina Center at Saint Joseph Hospital. Baltimore, Maryland, April 3, 1992.

1) *Classification of ARMD III: serous RPE detachment;* 2) *Unusual and less common causes of choroidal neovascularization.* Workshop Faculty Member, *Clinical management of age-related macular degeneration: angiographic interpretation, laser indications and techniques.* Invited Faculty Member, Sixteenth Annual Ophthalmology Meeting of the University of Wisconsin, Current Concepts Seminar '92. Madison, Wisconsin, March 26–29, 1992.

1) *Treatment of subfoveal choroidal neovascularization.* 2) *The Krypton Argon Regression of Neovascularization Study (KARNS): results of a randomized controlled, clinical trial.* Faculty Member, Aspen Retinal Detachment Society, Twentieth Annual Meeting. Aspen, Colorado, March 1–6, 1992.

1) *Pigment epithelial detachment: natural course and treatment.* 2) *Update of the Macular Photocoagulation Study.* 3) *Uncommon causes of choroidal neovascularization.* 4) *Practical management of diabetic retinopathy.* Guest Lecturer, 1991 Annual Clinical Conference of the Kansas City Society of Ophthalmology and Otolaryngology. Kansas City, Missouri, December 5–6, 1991.

Speaker, *Krypton laser for proliferative retinopathy and the Krypton Argon Regression of Neovascularization Study (KARNS).* Panel Member, 1) *Management of macular edema;* 2) *Applying the results of the Diabetic Retinopathy and Vitrectomy Study.* Invited Faculty Member, *Diabetic Retinopathy: A Comprehensive Review and Update.* Baltimore, Maryland, September 20, 1991.

Faculty Member, *Advanced retina symposium.* San Francisco, California, May 10–11, 1991.

1) *Unusual causes of choroidal neovascularization;* 2) *Pigment epithelial detachment;* 3) *Fluorescein angiography and its importance in the office management of macular disease;* 4) *Update of the Macular Photocoagulation Studies.* Featured Speaker, Memphis Eye Convention and the University of Tennessee 20th Annual Ophthalmology Day. Memphis, Tennessee, April 13–14, 1991.

1) *The Krypton Argon Regression of Neovascularization Study.* 2) *Uncommon causes of choroidal neovascularization.* 3) *Recurrent choroidal neovascularization.* Guest Faculty Member, Combined Vitreoretinal Surgical-Medical Retina Course. Sarasota, Florida, February 7–9, 1991.

Guest Faculty Member, *The Macula Symposium.* Manhattan Eye, Ear and Throat Hospital, New York, New York, January 11–12, 1991.

*Unusual causes of choroidal neovascularization.* Grand Rounds Visiting Lecturer, Massachusetts Eye and Ear Infirmary and Harvard Medical School, Boston, Massachusetts, November 15, 1990.

*A family with optic nerve pits and iris colobomas.* Retina Society. Key Largo, Florida, October 3–6, 1990.

*Treatment of serous macular detachments associated with optic pits.* Section Chairman, International Symposium on Fluorescein Angiography. Venice, Italy, September 8–12, 1990.

*A family with optic pits and optic nerve and iris colobomas.* Club Jules Gonin. Lausanne, Switzerland, September 3–6, 1990.

1) *Less common causes of choroidal neovascularization.* 2) *Management of pigment epithelial detachments.* 3) *Current management of retinal vein occlusions.* Visiting Professor, Annual Ophthalmology Conference. University of Rochester Medical Center, Rochester, New York, April 5–7, 1990.

*Trends in patient accrual rates by clinical center over a 10-year period.* Poster with the Macular Photocoagulation Study Group. Eleventh Annual Meeting of Society for Clinical Trials. Toronto, Canada, May 1990.

Moderator, *Choroidal Neovascularization Section.* Second International Symposium on Ocular Circulation and Neovascularization. Baltimore, Maryland, September 25–27, 1989.

*Unusual causes of subretinal neovascularization.* Current Concepts in Retinal Diseases Symposium. Case Western Reserve University School of Medicine, Cleveland, Ohio, September 22, 1989.

*Ocular involvement in a family with arteriohepatic dysplasia (Alagille's syndrome).* Nantucket Retina Meeting. Nantucket, Massachusetts, August 4–5, 1989.

Chair, Choroidal Neovascularization Section. Speaker, *Tunable dye laser therapy for choroidal neovascularization complicating age-related macular degeneration.* Combined Meeting of the Macula and Retina Societies. Boston, Massachusetts, June 21–25, 1989.

Program Co-Chairman. Speaker, *Multifocal choroiditis.* Ohio Ophthalmological Society Annual Meeting. Cleveland, Ohio, June 2–4, 1989.

*Tunable dye laser for choroidal neovascularization complicating age-related macular degeneration.* Second International Congress on Laser Technology in Ophthalmology. Lugano, Switzerland, May 24–27, 1989.

Faculty Member, Advanced Retinal Seminar, Retinal Specialists Think Tank. Cases presented: *Coats disease; Optic pits; Other diseases.* St. Mary's Hospital and Medical Center, Carmel, California, April 9–12, 1989.

1) *Dye laser photocoagulation.* 2) *Management of pigment epithelial detachment.* Visiting Professor, Kansai Medical University and Nagoya National Hospital, Osaka, Nagoya, and Tokyo, Japan, March 18–28, 1989.

*Advantages, disadvantages, and indications for use of the dye laser.* American Society of Ophthalmic Registered Nurses Symposium, Advances in the Surgical Management of Retinal Pathology. Las Vegas, Nevada, October 11, 1988.

Program Chairman. Speaker, *Laser photocoagulation for choroidal neovascularization associated with pigment epithelial detachment.* Ohio Ophthalmological Society Annual Meeting. Columbus, Ohio, June 24–26, 1988.

Speaker, *Natural history of pigment epithelial detachment with associated choroidal neovascular membrane in age-related macular degeneration.* Co-author, *The anatomy of the Kranenberg syndrome,* with H. Lincoff, I. Kreissig, L. Yannuzzi, M. Cox, T. Burton, F. Jakobiec. Club Jules Gonin. Brugge, Belgium, September 4–8, 1988.



*Natural history and results of treatment in pigment epithelial detachment with associated choroidal neovascularization.* Retina Society Annual Meeting. Philadelphia, Pennsylvania, June 17–18, 1988.

*Other diseases associated with subretinal neovascularization.* Symposium on Laser Treatment of Macular Disease. Pan-American Association of Ophthalmology Annual Meeting. Orlando, Florida, May 26–29, 1988.

1) *Photocoagulation for diabetic retinopathy.* 2) *The dye laser.* 3) *Age-related macular degeneration.* 4) *Ocular histoplasmosis syndrome.* 5) *Branch vein occlusion.* Guest Faculty Member, Clinical Advances in Treatment of Retina and Vitreous Diseases for the Practicing Ophthalmologist Symposium. Ophthalmology Center of Excellence of Humana Hospital, Lexington, Kentucky, May 20–21, 1988.

*The dye laser for choroidal neovascularization.* Guest of Honor, First Annual Meeting of the European Macula Group. Coimbra, Portugal, May 14, 1988.

1) *Branch vein occlusions.* 2) *Advances in the management of diabetic retinopathy.* 3) *The tunable dye laser for choroidal neovascularization.* Retina Update. New Orleans, Louisiana, April 23, 1988.

1) *Diabetic retinopathy, KARNs, macular edema, and application of dye laser to diabetic retinopathy.* 2) *The dye laser when applied to subretinal neovascularization and pigment epithelial disease.* Retina Symposium: State of the Art, A Look to the Future. Retina Research Fund of St. Mary's Hospital and Medical Center. San Francisco, California, March 17–19, 1988.

Meeting Moderator, *Update of laser therapy for choroidal neovascular membranes.* International Association of Ocular Surgeons. Hollywood, Florida, March 10, 1988.

1) *Panretinal PRP--single session vs. multiple sessions--treatment techniques.* 2) *Photocoagulation treatment of pigment epithelial detachment associated with choroidal neovascularization.* 3) *Branch retinal vein occlusion: results of BRVO Trial--indications and treatment techniques.* Midwinter Laser Course and Fluorescein Angiography Workshop, Washington University School of Medicine. St. Louis, Missouri, February 5–6, 1988.

*Age-related macular degeneration symposium.* New York Academy of Medicine. New York, New York, December 7, 1987.

*Krypton laser for proliferative diabetic retinopathy: The KARNs Study.* Diabetic Renal-Retinal Symposium 4: Management Strategy. State University of New York Health Science Center at Brooklyn. New York, New York, November 20–21, 1987.

*The diabetic eye.* Ohio State Medical Association, Annual Meeting. Columbus, Ohio, September 18–20, 1987.

Program Chairman. Speaker, *Clinical experience with the tunable dye laser*. Ohio Ophthalmological Society, Annual Scientific Meeting. Columbus, Ohio, September 18–20, 1987.

1) *Tunable dye laser*; 2) *Current management of diabetic retinopathy*. Phillips Eye Institute, Current Trends in Ophthalmology. Minneapolis, Minnesota, September 12, 1987.

*Clinical applications of the dye laser in maculopathies*. 13th Annual George N. Wise Day Symposium: Lasers in Ophthalmology. White Plains, New York, June 5, 1987.

1) *Age-related macular degeneration--current concepts in laser treatment* 2) *Diabetic retinopathy and pregnancy*. American Academy of Ophthalmology North Central Regional Update Course. Chicago, Illinois, April 24–26, 1987.

1) *Optimal laser wavelengths for fundus diseases*. 2) *Laser treatment for age-related macular degeneration*. 3) *Laser treatment for diabetic retinopathy revisited*. Visiting Professor, St. Louis University Department of Ophthalmology. St. Louis, Missouri, April 3, 1987.

1) *Retinal pigment epithelium detachments*. 2) *Choroidal neovascularization in myopia and angioid streaks*. 3) *Tunable dye laser for macula disease*. 4) *Update on macular photocoagulation*. Guest Faculty Member, the Thirtieth Annual Postgraduate Symposium in Ophthalmology, Ohio State University. Columbus, Ohio, March 27–28, 1987.

1) *Laser treatment for common retinal problems*. 2) *Office management of common retinal problems*. Invited Guest Speaker, Retina Vitreous Education and Research Foundation. Pittsburgh, Pennsylvania, March 14, 1987.

1) *Laser therapy for diabetic retinopathy*; 2) *Macular diseases*. Guest of Honor, Mexican Retina Society. Mazatlan, Mexico, February 2–7, 1987.

Visiting Professor, University of Louisville School of Medicine, Department of Ophthalmology. Louisville, Kentucky, January 15, 1987.

*Optimal laser wavelengths for various retinal vascular and macular diseases*. Louisville Ophthalmological Society. Louisville, Kentucky, January 15, 1987.

Faculty Member, *Advanced Retinal-Laser Course*. Montego Bay, Jamaica, January 7–11, 1987.

*Clinical experience with the tunable dye laser*. Retina Society of New Jersey. Newark, New Jersey, December 10, 1986.

*Laser photocoagulation for choroidal neovascularization associated with pigment epithelial detachment*. International Laser Photocoagulation Meeting. New Orleans, Louisiana, November 5–8, 1986.

Consultant Panel Member, Standards of Care Conference to Set Standards for Care of Diabetic Retinopathy. Kentucky Diabetes Foundation. Lexington, Kentucky, October 16–17, 1986.

*Clinical experience with the tunable dye laser.* Keynote Speaker, Boston University Department of Ophthalmology Annual Alumni Meeting. Boston, Massachusetts, October 15, 1986.

*New studies in the treatment of choroidal neovascular membranes.* Keynote Speaker, Ophthalmic Laser Surgical Society. New York, New York, September 16, 1986.

*Clinical experience with the tunable dye laser.* International Association of Ocular Surgeons. Montreal, Canada, September 12–15, 1986.

*Optic nerve pit with sensory retinal detachment.* Wills Eye Hospital Conference on Fluorescein Angiography. Philadelphia, Pennsylvania, September 5, 1986.

*Laser photocoagulation for choroidal neovascularization (CNV) associated with pigment epithelial detachment in patients over the age of 55.* Club Jules Gonin. Copenhagen, Denmark, August 10–15, 1986.

Program Chairman, New Studies of Laser Therapy for Choroidal Neovascularization. Ohio Ophthalmological Society, Annual Scientific Meeting, Columbus, Ohio, June 7–8, 1986.

Allied Health Professional Conference, Cleveland Diabetes Association. Cleveland, Ohio, April 23, 1986.

Member, Scientific Advisory Board. International Diabetologist Workshop of the Pennsylvania Diabetes Academy, Physicians' Leadership Series. Princeton, New Jersey, January 19–22, 1986.

*Laser therapy for hemorrhagic pigment epithelial detachments.* Pan-American Association of Ophthalmology. Key Biscayne, Florida, January 10–12, 1986.

*1) Posterior segment uses of the YAG laser. 2) Laser treatment for angioid streaks. 3) The Influence of pregnancy on diabetic retinopathy. 4) Krypton laser for proliferative diabetic retinopathy.* American College of Surgeons. Chicago, Illinois, October 13–18, 1985.

*Krypton Argon Regression of Neovascularization Study (for proliferative diabetic retinopathy).* Retinal and Macular Disease and Fluorescein Angiography Symposium. Baden-Baden, West Germany, September 16–20, 1985.

*Angioid streaks.* Fourth Annual Symposium on Retinal and Macular Disease. Paris, France, September 13–14, 1985.

Visiting Professor. *YAG applications in anterior and posterior vitreous.* Heritage Hospital, Detroit, Michigan, May 18, 1985.

1) *Current management of choroidal neovascular membranes.* 2) *Proliferative diabetic retinopathy.* Kresge Eye Institute, Detroit, Michigan, April 24, 1985.

1) *Other choroidal neovascular membranes--diagnosis and treatment.* 2) *KARNS.* Symposium on Diseases of the Macula. Scheie Eye Institute, University of Pennsylvania, Philadelphia, Pennsylvania, April 17–19, 1985.

*YAG laser for vitreous surgery.* Vitreous Society. Palm Springs, California, November 29–December 1, 1984.

Co-Chairman, Vitreous Surgery Section. Speaker, *YAG laser for vitreous surgery.* International Symposium on Surgical Lasers in Ophthalmology (Chaired by Dr. Danielle Aron-Rosa). Paris, France, June 28–29, 1984.

1) *Vitrectomy for proliferative diabetic retinopathy.* 2) *Clinical value of various laser wavelengths.* Hadassah Hospital Annual Meeting. Israel, June 1984.

Chairman, Macular and Retinal Disease Section. Speaker, *Photocoagulation treatment for diabetic retinopathy.* The American-Israeli International Ophthalmologic Society Laser Meeting. Jerusalem, Israel, June 18–22, 1984.

1) *Other chorioretinal diseases with choroidal neovascularization.* 2) *Management of proliferative diabetic retinopathy.* 3) *Management of the diabetic macula.* 4) *Management of maculopathy of aging.* University of Michigan 56th Annual Spring Postgraduate Course. Ann Arbor, Michigan, April 2–3, 1984.

*Capabilities of different laser wavelengths.* International Association of Ocular Surgeons, Honolulu, Hawaii, December 5–9, 1983.

*Krypton laser photocoagulation for proliferative diabetic retinopathy.* 5th International Congress of Laser Medicine and Surgery. Detroit, Michigan, October 7–9, 1983.

*Laser for presumed ocular histoplasmosis syndrome.* International College of Surgeons, Cleveland, Ohio, September 27, 1983.

*Intraocular microsurgical and vitrectomy course.* Georgetown University, Washington, DC, June 1983.

*The argon laser.* Ohio State Medical Association. Columbus, Ohio, May 17, 1983.

1) *Basics of common retinal disorders and therapeutic update.* 2) *Senile macular degeneration.* 3) *Presumed ocular histoplasmosis syndrome.* Cincinnati, Ohio, May 14, 1983.

1) *The krypton laser.* 2) *Krypton laser for proliferative diabetic retinopathy.* International Ophthalmic Laser Symposium. Washington, DC, April 8–9, 1983.

1) *Laser blue, green, yellow, red – theoretical considerations.* 2) *Management of SRCN with krypton red.* 3) *Treatment of macular pucker and results.* 4) *The myopic macula.* 5) *Chairman, Macula Society Exhibit: Evaluation and management of proliferative retinopathies.* First Annual Retina Meeting. Indiana University, Indianapolis, Indiana, March 25–26, 1983.

1) *Special techniques: fluid gas exchange, bipolar cautery, and vacuum technique.* 2) *Role of argon laser photocoagulation therapy in the diabetic patient.* 3) *Anterior segment vitrectomy.* 4) *Chairman, Macula Society Exhibit: Evaluation and management of proliferative retinopathies.* Diabetes Symposium. Scheie Eye Institute, University of Pennsylvania, Philadelphia, Pennsylvania, February 1983.

*YAG laser.* Soroka Hospital, Ben Gurion University of the Negev, Israel, February 1983.

*YAG laser course.* Ernest A. Katzen Memorial Eye Research Institute and Mercy Hospital, Baltimore, Maryland, November 1982.

*Krypton laser scatter treatment for proliferative diabetic retinopathy.* XXIV International Congress of Ophthalmology, International Symposium on Retinal Diseases. San Diego, California, October 1982.

Guest of Honor, II International Symposium sponsored by the Venezuelan Society of Ophthalmology. Caracas, Venezuela, September 1982.

Course Director, *Intraocular microsurgical and vitrectomy course.* St. Luke's Hospital, Cleveland, Ohio, September 1982.

*Intraocular microsurgical and vitrectomy course.* Georgetown University, Washington, DC, September 1982.

*Intraocular microsurgical and vitrectomy course.* Bethesda Hospital, Cincinnati, Ohio, August 1982.

Course Director, *Intraocular microsurgical workshop.* St. Luke's Hospital, Cleveland, Ohio, July 1982.

*Intraocular microsurgical and vitrectomy course.* Ingalls Memorial Hospital, Chicago, Illinois, June 1982.

International Symposium of Anterior and Posterior Segments Surgery. Gleneagles, Scotland, May 1982.

Ohio State Medical Association. Dayton, Ohio, May 1982.

1) *Diabetic retinopathy including pregnancy.* 2) *High-risk PDR in juvenile onset diabetics.* 3) *Fundus aspects of systemic disease.* 4) *Management of common vascular lesions of the retina.* 5) *Red krypton laser for macular and retinal vascular diseases.* Visiting Professor, Ophthalmology Seminar. Southwestern University, Dallas, Texas, March 1982.

*Red krypton laser for macular and retinal vascular diseases.* New Orleans Academy of Ophthalmology. New Orleans, Louisiana, March 1982.

Symposium on Ocular Histoplasmosis. Indiana University, Bloomington, Indiana, January 1982.

*Intraocular Microsurgical and Vitrectomy Course.* Scheie Institute, University of Pennsylvania, Philadelphia, Pennsylvania, October 1981.

International Association of Ocular Surgeons. Monte Carlo, October 1981.

*Intraocular microsurgical and vitrectomy course.* Henry Ford Hospital, Detroit, Michigan, July 1981.

*Chairman, Macula Society Exhibit: Current evaluation and management of macular diseases.* Wills Eye Hospital, Philadelphia, Pennsylvania, .1981

Course Director, Ohio State Medical Association Meeting, Ophthalmology Symposium. Cleveland, Ohio, May 1981.

*Diabetes and pregnancy.* Pennsylvania Ophthalmological Academy. Philadelphia, Pennsylvania, May 1981.

Retina Workshop. St. Mary's Hospital (San Francisco), Yosemite National Park. March 1981.

American Diabetes Association 40th Annual Meeting. Washington DC, June 1980.

Ohio State Medical Association. Cincinnati, Ohio, May 1980.

American College of Surgeons. Dayton, Ohio, May 1980.

Education Symposium, Diabetes Association of Greater Cleveland. Cleveland. Ohio, May 1980.

Conference, High Risk Pregnancies. University Hospitals, Cleveland, Ohio, April 1980.

Visiting Professor, Vanderbilt University, Nashville, Tennessee, March 1980.

Course Director, *Intraocular microsurgical workshop.* St. Luke's Hospital, Cleveland, Ohio, July 1980.

*Intraocular microsurgical and vitrectomy course.* Ingalls Memorial Hospital, Chicago, Illinois, July 1980.

Ophthalmic Photographers Society Annual Meeting. San Francisco, California, November 1979.

Biennial Congress of the Israel Ophthalmology Society. Jerusalem, Israel, October 1979.

*Intraocular microsurgical and vitrectomy course.* Henry Ford Hospital, Detroit, Michigan, October 1979.

Course Director, *Vitrectomy workshop.* St. Luke's Hospital, Cleveland, Ohio, September 1978, and August 1979.

Course Director, *Clinical management of retinal diseases.* St. Luke's Hospital, Cleveland, Ohio, June 1978.

*Post-graduate diabetes course.* Case Western Reserve University, Cleveland, Ohio, March 1978.

*Clinical management of retinal diseases.* Kresge Eye Institute, Wayne State University, February 1978.

*Intraocular microsurgical and vitrectomy course.* Ingalls Memorial Hospital, Chicago, Illinois, December 1977.

*Youngstown Hospital Association Joint Ophthalmological Symposium.* Youngstown, Ohio, October 1977.

*Retinal vascular disease course.* Detroit, Michigan, June 1977.

*Medicine 1977 course.* Case Western Reserve University, Cleveland, Ohio, May 1977.

*Symposium on diabetes.* Cleveland, Ohio, April 1977.

Erie Ophthalmology Society. Erie, Pennsylvania, February 1977.

*First annual fluorescein angiography course.* Chicago, Illinois, April 1975.