

CURRICULUM VITAE

Z. NICHOLAS ZAKOV, MD, FACS
(ZVETAN NIKOLOV ZAKOV, MD, FACS)

OFFICE ADDRESSES Retina Associates of Cleveland, Inc.
3401 Enterprise Parkway, Suite 300; Cleveland, Ohio 44122
14725 Detroit Avenue, Suite 200; Cleveland, Ohio 44107
15299 Bagley Road, Suite 200; Cleveland, Ohio 44130
17534 Royalton Road, Suite 201; Cleveland, Ohio 44136
9485 Mentor Avenue, Suite 211; Mentor, Ohio 44060
6100 South Broadway Avenue, Suite 200; Lorain, Ohio 44052
690 White Pond Drive, Suite 120; Akron, Ohio 44320
170 North Street NE; Warren, Ohio 44483
5390 Belmont Avenue; Youngstown, Ohio 44505
708 N Jefferson Street; New Castle, Pennsylvania 16101

TELEPHONE 216-831-5700

WEBSITE www.retina-doctors.com

EDUCATION

High School Cleveland Heights High School
Cleveland, OH
1962

College Kenyon College
Gambier, OH
1962–66, BA

Medical School Columbia University
College of Physicians and Surgeons
New York, NY
1966–70, MD

POSTGRADUATE TRAINING

Internship Surgical Internship
Columbia Presbyterian Medical Center
New York, NY
1970–1971

<i>Residency</i>	Ophthalmology Cleveland Clinic Foundation Cleveland, OH 1973–1976
<i>Fellowships</i>	Retinal & Vitreous Diseases Bascom Palmer Eye Institute University of Miami Miami, FL 1976–1977
	Retinal & Vitreous Diseases Clinical & Experimental Pathology Howe Laboratory of Ophthalmology Massachusetts Eye & Ear Infirmary Harvard Medical School Boston, MA 1977–1978

LICENSURE AND BOARD CERTIFICATION

Licensed to practice medicine in Ohio, Colorado, and Pennsylvania

Diplomate, American Board of Ophthalmology 1977

PROFESSIONAL POSITIONS

Retina Associates of Cleveland, Inc.	1990–
Practice limited to Retinal Diseases and Surgery. Associates: Lawrence J. Singerman, MD; Michael A. Novak, MD; Hernando Zegarra, MD; Scott D. Pendergast, MD; David G. Miller, MD; Joseph M. Coney, MD; Jerome P. Schartman, MD; Llewelyn J. Rao, MD; Lili G. Kaplan, MD; Shawn A. Lewis, MD	
Head, Section of Retinal & Vitreous Disease Department of Ophthalmology Cleveland Clinic Foundation Cleveland, OH	1986–1990
Staff Member Retinal and Vitreous Section, Department of Ophthalmology Cleveland Clinic Foundation Cleveland, OH	1978–1990

Associate Staff Member Department of Ophthalmology Cleveland Clinic Foundation Cleveland, OH	1976–78
Fellow of the Royal Society of Medicine	2010–2013
Corporate Consultant (unpaid) Synergetics, Inc. O’Fallon, MO	2006–2010
Lecturer Ophthalmic Pathology Section Case Western Reserve University Basic Science Course in Ophthalmology	1980–84
Consultant National Institute for Occupational Safety and Health Epidemiologic Field Study of the Incidence of Uveal Melanoma in a Population of Chemical Workers	1978
Lecturer Ophthalmic Pathology Section Harvard Basic Science Course in Ophthalmology	1977–82
Diplomate Lancaster Basic Course in Ophthalmology	1973
General Medical Officer U.S. Public Health Service, Indian Health Service Belcourt, ND Rank at retirement: Lieutenant Commander	1971–73
Visiting Student Institute of Ophthalmology and Moorfields Eye Hospital, London, England	1970

ACADEMIC APPOINTMENTS

Clinical Professor of Ophthalmology, 2006–
Associate Clinical Professor of Ophthalmology, 1997–2006
Assistant Clinical Professor of Ophthalmology, 1990–1997
Case Western Reserve University School of Medicine
Cleveland, Ohio

PROFESSIONAL SOCIETIES AND COMMITTEES

Retina Society

By-laws Committee Chairman, 2002–2010

Credentials Committee, 1986–89

Chairman of Committee, 1988–89

Program Co-Chairman, 1985

American Society of Retina Specialists (formerly the Vitreous Society)

Representative to the American Academy of Ophthalmology Council, 2006–2012

Liaison to the American Retina Foundation, 2002–2006

Practice Management Committee Founder and Chairman, 1999–2002

Emeritus Director, 2001–2008

Awards Committee Founder and Chairman, 1996–2006

By-laws Committee Chairman, 1991–96

President, 1987–88

Board of Directors, 1985–2008

Program Co-Chairman, 1985, 1986

American Academy of Ophthalmology Council

Co-chair, Great Lakes section, 2007–2009

American Board of Ophthalmology

Associate Examiner, 1986–2010

Cleveland Ophthalmological Society

President, 1992–93

President-Elect, 1991–92

Chairman, Education Program Committee, 1991–92

Executive Committee, 1991–94

Peer Review Committee, 1991–92

American Society of Ocular Trauma (formerly the US Eye Injury Registry)

Emeritus Director, 2002–2008

Board of Directors, 2002–2008

Founding President, 2002

American Eye Study Club

Charitable Foundation Committee, 2002–2006

Emeritus Member, 1992–

Member, 1982–1992

Cleveland Clinic

Program Co-Chairman, Dedicatory Meeting of new Department of Ophthalmology, 1986

Hillcrest Hospital

Head, Section of Retinal/Vitreous Diseases and Surgery, 1990–2008

Diabetes Education Committee, 1991–1999

University Hospitals of Cleveland, Department of Ophthalmology and Visual Sciences

Member, Appointments, Promotions, and Tenure Committee, 1998–1999, 2007–2009

Case Western Reserve University School of Medicine
Member, Advisory Board for Macular Degeneration Research, 2008–2012

Cleveland Eye Bank
35th Anniversary Campaign Committee

Ohio Eye Injury Registry
Scientific Co-Director, 1994–1998

United States Eye Injury Registry
President, 1998–2003
President-Elect, 1996–1998
By-laws Committee, 1997–2008
Executive Committee, 1996–2002
Nominating Committee, 1996–2002
Board of Directors, 1994–2008

South East European Ophthalmological Society (formerly the Balkan Ophthalmological Society)
Founding Member, 1998
By-laws Committee, 1998–2002

International Society of Ocular Trauma
By-laws Committee, 2000–2008
International Scientific Committee, International Symposium on Ocular Trauma, 2006, Rome, Italy
Organizing Committee, 2003 Meeting, Sopron, Hungary

Eye Fly Club
Naming Co-Chairman

Visionary Practitioner Recognition Award Program, Pfizer Ophthalmics
Co-Chairman, 2003–2004

Mediterranean Retina Meeting, 2004–
Co-Founder and Co-Director with Dr. Murat Oncel

Ayhan Sahenk Award for Vitreoretinal Excellence
Creator, in conjunction with the Sahenk Family
First awarded in 2004 at the Mediterranean Retina Meeting

American Journal of Ophthalmology
Scientific Reviewer

American Society of Retina Specialists (formerly the Vitreous Society) Online Journal
Editorial Board, 1998–2008

Cleveland Clinic Journal of Medicine, Editorial Committee
Book Review Editor, 1983–89

Ocular Surgery News
Book Review Editor, 1989–2004

Ophthalmic Lasers and Surgery
Scientific Reviewer

Ophthalmology
Scientific Reviewer

Retina-Vitreus (Turkish Retinal Journal)
Editorial Board, 1993–2004

HONORS AND AWARDS

25-year Service Award, Hillcrest Hospital	2015
Ayhan Sahenk Award for Vitreoretinal Excellence	2014
Mediterranean Retina Board Friendship Award for longstanding contribution and collaboration	2010
Turkish Ophthalmology Society	
Fourth Mediterranean Retina Meeting	
American Retina Foundation	2009
Award in recognition of extensive work with the Foundation and of outstanding contributions as a founding member and as past president	
Appreciation Award for Dedication and Service	2008
Council of the American Academy of Ophthalmology	
Nikos Kazantzakis Medal of the University of Crete, Greece	2007
On the occasion of the 10 th Aegean Retina Meeting	
Albert D. Ruedemann, Jr. Lecturer	2005
American Eye Study Club	
Honorary citizen of the city of Dubrovnik, Croatia	2005
Honorary member of the Union of Bulgarian Ophthalmologists	2004
Ambassador of Goodwill of Israel, Israel Ministry of Tourism	2003
Leadership Award, American Society of Ocular Trauma	2002
Senior Honor Award, Vitreous Society (American Society of Retinal Specialists)	2001
Public Service Award, Ohio Ophthalmological Society,	1998, 1999
Honor Award, American Academy of Ophthalmology	1998
Vitreous Society (American Society of Retinal Specialists) Honor Award	1998
Best Doctors in America	1996–2015
Excellence in Teaching Award, Mt. Sinai Medical Center	1991
Vitreous Society (American Society of Retinal Specialists) Leadership Award	1987
American Board of Ophthalmology-Certificate of Appreciation	1986–91
for Participation as an Associate Examiner	
Heed Ophthalmic Foundation Fellowship	1976–77
Alvin Behrens Memorial Prize in Ophthalmology	1970
Robert Bowen Brown, Jr. Prize in biology	1966
Summa cum laude, highest honors in biology	1966
Phi Beta Kappa	1965
Lubrizol Corporation Chemistry Prize	1962

MEMBERSHIPS

American Academy of Ophthalmology
 American College of Surgeons
 American Eye Study Club
 American Society of Ocular Trauma
 American Society of Retinal Specialists (formerly the Vitreous Society)
 U.S. Eye Injury Registry

Retina Society
Macula Society
Aspen Retinal Detachment Society
Ohio Ophthalmological Society
Academy of Medicine of Cleveland
Cleveland Ophthalmological Society
Mediterranean Retina Group
Turkish American Ophthalmological Society
Aegean Retina Meeting Group
International Society of Ocular Trauma
Schepens International Society
Macular Degeneration International
Pan-American Association of Ophthalmology
South East European Ophthalmological Society
Eye Fly Club
European Vitreoretinal Society

HOSPITAL AFFILIATIONS

Hillcrest Hospital; Cleveland, Ohio
University Hospitals of Cleveland; Cleveland, Ohio
University of Pittsburgh Medical Center (UPMC); Pittsburgh, Pennsylvania

RESEARCH ACTIVITIES

NIH-funded Grants

Collaborative Ocular Melanoma Study

Principal Investigator, Retina Associates of Cleveland Center, 1997–2003

Co-investigator, Cleveland Clinic Center, 1987–2003

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

Co-investigator, 2011–2013

Age-Related Eye Disease Study 2

Co-investigator, 2006–2012

*Standard Care vs. **C**orticosteroid for **R**etinal Vein Occlusion (**SCORE**) Study*

Co-investigator, 2004–2009

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

Co-investigator, 2003–

Complications of Age-related Macular Degeneration Prevention Trial
Co-investigator, 1998–

Choroidal Neovascularization Prevention Trial – Pilot Study
Co-investigator, 1995–2001

Other National Clinical Trials

Choroidal indeterminate melanocytic lesions prompt vs deferred treatment—a multi center randomized study
Principal Investigator, 2008–

Hydrokinetic retinal manipulation using the liquid and viscous fluorocarbon perfluorophenanthrene
Principal Investigator, 1993–94

Efficacy and safety study of squalamine ophthalmic solution in subjects with neovascular AMD (MAKO)
Co-investigator, 2016–

Randomized, double-masked, multicenter, three-arm study comparing the efficacy and safety of RTH-258 versus aflibercept in subjects with neovascular age-related macular degeneration
Co-investigator, 2015–

LHA510 proof-of-concept study as a maintenance therapy for patients with wet age-related macular degeneration
Co-investigator, 2015–

An 18-month Phase 2a open label, randomized study of Avastin, Lucentis, or Eylea (anti-VEGF therapy) administered in combination with Fovista (anti-PDGF BB pegylated aptamer)
Co-investigator, 2015–

Phase 3, randomized, double-masked, controlled trial to establish the safety and efficacy of intravitreal administration of Fovista (anti PDGF-B pegylated aptamer) administered in combination with either Avastin or Eylea compared to Avastin or Eylea monotherapy in subjects with subfoveal neovascular age-related macular degeneration
Co-investigator, 2015–

Phase 3, randomized, double-masked, controlled trial to establish the safety and efficacy of intravitreal administration of Fovista (anti PDGF-B pegylated aptamer) administered in combination with Lucentis compared to Lucentis monotherapy in subjects with subfoveal neovascular age-related macular degeneration
Co-investigator, 2013–

Phase 2 multicenter randomized clinical trial of ciliary neurotrophic factor (CNTF) for macular telangiectasia type 2 (MacTel)
Co-investigator, 2013–

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

Co-investigator, 2012–2014

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

Co-investigator, 2011–

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

Co-investigator, 2011–2013

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

Co-investigator, 2010–2011

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

Co-investigator, 2009–2012

Geographic Atrophy Treatment Evaluation (GATE) Study (Alcon)

Co-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)

Co-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 diabetic macular edema secondary to diabetic retinopathy

Co-investigator, 2008–2010

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

Co-investigator, 2008–2009

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

Co-investigator, 2007–2012

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

Co-investigator, 2007–2010

Age-related Macular Degeneration: Detection of Onset of new Choroidal neovascularization

(AMD DOC): Comparison of PHP (Preferential Hyperacuity Perimetry) with supervised Amsler grid in detecting neovascular AMD in eyes at high risk for CNV

Co-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

Co-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

Co-investigator, 2007–2009

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

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)

Co-investigator, 2007–2008

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)

Co-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

Co-investigator, 2007

Macugen (pegaptanib sodium) for angioid streaks complicated by choroidal neovascular membrane

Co-investigator, 2006–2010

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

Co-investigator, 2006–2010

SIRIUS: A 2-year, multicenter, randomized, controlled, masked, dose-finding trial to assess the safety and efficacy of multiple intravitreal injections of AGN 211745 in patients with subfoveal choroidal neovascularization secondary to age-related macular degeneration

Co-investigator, 2006–2008

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

Co-investigator, 2006–2008

Sirion 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

Co-investigator, 2006–2007

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, 2006–2007

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)

Co-investigator, 2006–2007

Protocol FVF3426g (HORIZON): An open-label, multicenter extension study to evaluate the safety and tolerability of ranibizumab in subjects with subfoveal choroidal neovascularization (CNV) secondary to age related macular degeneration (AMD) who have completed the treatment phase of a Genentech-sponsored ranibizumab study

Co-investigator, 2006–2007

Eyeteck 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

Natural history study of macular telangiectasia (MacTel)

Co-investigator, 2005–

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

Co-investigator, 2005–2011

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

Co-investigator, 2005–2007

RNAi Assessment of Cand5 in Diabetic Macular Edema (RACE)

Co-investigator, 2005–2007

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

Co-investigator, 2005–2007

Phase 3 assessment of the safety and efficacy of two doses of dexamethasone vs. sham treatment with the dexamethasone posterior segment drug delivery system applicator in patients with macular edema following central retinal vein occlusion or branch retinal vein occlusion.

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

An 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 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

Co-investigator, 2005–2006

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

Co-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
Co-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
Co-investigator, 2005–2006

Protein Kinase C β Inhibitor Study B7A-MC-MBDL. Reduction in the occurrence of center-threatening diabetic macular edema
Co-investigator, 2004–2010

Anecortave Acetate Risk-Reduction Trial (AART)
Co-investigator, 2004–2008

A randomized, double-masked, placebo controlled, parallel group, multi-center, dose-ranging study of denufosol tetrasodium (INS37217) intravitreal injection in subjects with rhegmatogenous retinal detachment
Co-investigator, 2004–2006

Eyetech 1011B: A Phase II randomized, double-masked, multi-center trial, in parallel groups, to determine the safety, efficacy and pharmacokinetics of intravitreal injections of pegaptanib sodium compared to sham injection for 30 weeks in patients with recent vision loss due to macular edema secondary to central retinal vein occlusion)
Co-investigator, 2004–2006

A randomized, single-masked, multicenter, Phase 2 evaluation of the effect of photodynamic therapy using verteporfin (Visudyne[®] 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
Co-investigator, 2004–2006

A Phase III, multicenter, randomized, double-masked, active treatment-controlled study of the efficacy and safety of rhuFabv2 (ranibizumab) compared with verteporfin (Visudyne) photodynamic therapy in subjects with predominantly classic subfoveal neovascular age-related macular degeneration(ANCHOR)
Co-investigator, 2003–2006

The Implantable Miniature Telescope (IMT[™]) in patients with central vision impairment associated with age-related macular degeneration or Stargardt’s macular dystrophy
Co-investigator, 2003–2005

Intravitreal Steroid Injection Studies (ISIS)
Co-investigator, 2002–2006

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

Phase II/III randomized, double-masked, controlled, dose-ranging, multicenter comparative trial, in parallel groups, to establish the safety and efficacy of intravitreal injections of EYE001 (anti-VEGF pegylated aptamer) given every 6 weeks for 54 weeks in patients with AMD

Co-investigator, 2001–2006

Protein Kinase C β Inhibitor – Diabetic Retinopathy Study 2

Co-investigator, 2001–2006

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®) in the treatment of persistent macular edema

Co-investigator, 2001–2003

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™

Co-investigator, 2000–2001

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

Co-investigator, 1999–2000

Protein Kinase C β Inhibitor – Diabetic Macular Edema Study and Diabetic Retinopathy Studies

Co-investigator, 1998–2002

An evaluation of safety and duration of efficacy of anecortave acetate sterile suspension (30 mg, 15 mg or 3 mg) versus placebo following a single sub-Tenon's injection for the inhibition of neovascularization in patients with age-related macular degeneration

Co-investigator, 1998–2001

Perfluoron™ (perfluoro-n-octane) for use in the treatment of complicated retinal detachment

Co-investigator, 1995–1996

Vitrace™ for Vitreous Hemorrhage Study

Co-investigator, 1998–1999

Age-related Macular Degeneration / Thalidomide Study

Co-investigator, 1995–2000

Protocol SO14297 Interferon Alfa-2a

Co-investigator, 1994–96

Alfa-interferon treatment of choroidal neovascularization

Co-investigator, 1993–96

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

Co-investigator, 1993–94

SCIENTIFIC PRESENTATIONS

Over 310 lectures, posters, and presentations 1974–

VISITING PROFESSOR AND LECTURER

Red Lodge Forum for Provocative Issues Red Lodge, Montana Speaker, <i>Unintended Consequences</i>	2014
St. Louis University Department of Ophthalmology St. Louis, Missouri	2014
St. Louis Ophthalmological Society	2014
Croatian Ophthalmology Congress Dubrovnik, Croatia	2010
Mediterranean Retina Meeting IV Antalya, Turkey Organizer	2010
Vitreoretinal Symposium IV Lodz, Poland	2010
Mediterranean Retina Meeting III Antalya, Turkey Organizer	2008
Ravenna International Courses in Ophthalmology Ravenna, Italy	2007
University of Ljubljana Ljubljana, Slovenia	2007
International Retina Congress Tenth Anniversary of the Retina Institute of Karnataka Bangalore, India Chief Discussant	2006
Mediterranean Retina Meeting II Antalya, Turkey Organizer	2006
Vitreoretinal Symposium II Lodz, Poland	2005

XIII Afro-Asian Council of Ophthalmology Istanbul, Turkey	2004
Mediterranean Retina Meeting I Antalya, Turkey Organizer	2004
Seventh Congress of the Union of Bulgarian Ophthalmologists Plovdiv, Bulgaria Keynote Speaker	2004
The 6th International Advanced Vitreo Retinal Surgery Course (6th IAVRSC) and Silver Jubilee Celebrations of Sankara Nethralaya Chennai, India Keynote Speaker	2003
Vitreoretinal Symposium I Lodz, Poland	2003
Goldschleger Eye Institute Annual Meeting Tel Aviv, Israel	2003
Thirty-fifth Panhellenic Ophthalmological Congress Halkidiki, Greece	2002
XIII th European Congress of Ophthalmology Istanbul, Turkey	2001
Second Congress of the Union of Bulgarian Ophthalmologists Borovets, Bulgaria Keynote Speaker	1999
Harkness Eye Institute, Department of Ophthalmology Columbia University College of Physicians & Surgeons New York, New York	1998
Thirty-first Panhellenic Ophthalmological Congress Halkidiki, Greece	1998
University of Istanbul, Cerrahpasa Medical School Istanbul, Turkey	1998
V Tubingen Detachment Course Plovdiv, Bulgaria	1993
Gazi University Ankara, Turkey	1993
Youngstown Ophthalmology Group University of Akron Akron, Ohio	1993
University of South Florida Tampa, Florida	1992
Turkish Ophthalmological Society Annual Meeting Ankara, Turkey	1990
Buffalo Ophthalmological Society University of Buffalo, Buffalo, NY	1989
St. Francis Medical Center Pittsburgh, Pennsylvania	1989

University of Istanbul, Cerrahpasa Medical School	1989
Istanbul, Turkey	1989
Aegean University	
Izmir, Turkey	1989
West Virginia University, Department of Ophthalmology	1989
Morgantown, West Virginia	
Peruvian Ophthalmology Society	1984
Venezuelan Ophthalmology Society	1982
Caylor-Nickel Clinic	
Bluffton, Indiana	1980
Youngstown Ophthalmology Group	1980
Erie Ophthalmological Society	1979

MISCELLANEOUS CHARITIES, ACTIVITIES, AND BOARDS

Alumni activities, Kenyon College	
Extern Sponsor Program, 1978–2013	
Alumni Association Distinguished Service Award, 2006	
Class of '66 Special Gift Co-Chairman	
Gift Chair, 35 th Reunion	
25 th , 30 th , and 35 th Reunions Committee	
Tourette Syndrome Association of Ohio, Inc.	
Vice President, 1987–88	
Board of Trustees, 1986–89	
Zakov Family Scholarship	
Established 2002 at Kenyon College, Gambier, Ohio	
Zakov Family Scholarship	
Established 1997 at Ferris State University, Big Rapids, Michigan	
The North Hanna Foundation Educational Fund	
Board of Trustees, 1995–	
American Eye Study Club Foundation	
Board of Trustees, 2003–	
American Retina Foundation (formerly the Vitreous Society Foundation)	
President, 2006–2009	
Vice President, 2000–2006	
Founding Donor, 2005	
Ad Hoc Committee, 1999–	
Board of Trustees, 1998–	
Roundtable Book Club	
Member, 2014–	
Pasteur Club	
President, 2013–2017	
Member, 2013–	
Red Lodge Forum for Provocative Issues	
Member, 2012–	

Palm Island Philosophical Society (PIPS)

Co-founder, 2012

Member, 2012–

Docent, Body Worlds II

Great Lakes Science Center, Cleveland, Ohio, 2005

The Book Review Depot – a blog for book reviews (<http://bookreviewdepot.blogspot.com>)

Founder, 2011

NCI Book Club

Member, 2010–

Philosophical Club of Cleveland

Secretary, 2010–2011

Treasurer, 2009–2010

Member, 2007

Travelers' Century Club

Member, 2008–

The Union Club

Member, 2008–

Donor: Cleveland Play House, Cleveland Orchestra

PUBLICATIONS*Articles and Chapters*

1. 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.
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