Dear Colleague,

In this annual summary, I will present some of the department’s current research endeavors and list some of the highlights in other areas. The department research focus continues to look at elucidating glaucoma pathophysiology, studying eye movement disorders, expanding corneal limbal stem cell production ex vivo, and examining color pathways in the primate visual cortex.

Our residency patient volume continues to grow and we have added a regular educational component to the Kings County Hospital Center rotation where 50% of the resident time is spent over their 36 months in training. This highly sought after residency is quite demanding but the end result is a very well trained graduate. Our residents continue to do fellowships in the majority of cases, a trend seen throughout the US. What this means for primary eye care delivery in the future remains an unresolved question. Who will fill this gap when the number of patients grows with the aging boomers is an important issue to tackle. Will ophthalmology’s role erode or evolve?

Douglas R. Lazzaro, MD, FACS, FAAO
Professor and Chair, Department of Ophthalmology, The Richard C. Troutman, M.D. Distinguished Chair in Ophthalmology and Ophthalmic Microsurgery

I encourage the ophthalmology community to remain engaged in policy decisions and be active in ophthalmology societies. When we have a voice, there remains hope that our opinions will be heard. I strongly believe in academic medicine and know that we are training the best and the brightest from medical school classes. Despite many obstacles in the practice of medicine that continue to be placed upon us, we must continue to persist in our mission—providing excellent eye care, teaching the next generation, and investigating cures for disease.

I thank you in advance for taking the time to review this update, and wish you all a healthy, and professionally and personally fulfilling 2016.

Douglas R. Lazzaro, MD, FACS, FAAO
Professor and Chair, Department of Ophthalmology, The Richard C. Troutman, M.D. Distinguished Chair in Ophthalmology and Ophthalmic Microsurgery
Dr. John Danias


Dr. Stephen Kaufman

Professor and Vice Chairman of Ophthalmology, served as the 2015 Director of the American Academy of Ophthalmology’s Cornea Subspecialty Day. He is a member of the Board of Directors of the Cornea Society, the Chairman of the American Academy of Ophthalmology’s Cornea Knowledge Base Committee, the Co-Chairman of the Midwest Cornea Association and the Cornea Representative on the American Academy of Ophthalmology’s Digital Media Committee. He is conducting research in many areas of Ophthalmology and is the co-editor of a ophthalmic trauma textbook with Dr. Douglas Lazzaro, and is serving on the editorial board of 2 ophthalmic journals.

Dr. Douglas Lazzaro


Dr. Susan Martinez-Conde

Professor and Vice Chairman of Ophthalmology, served as the 2015 Director of the American Academy of Ophthalmology’s Cornea Subspecialty Day. He is a member of the Board of Directors of the Cornea Society, the Chairman of the American Academy of Ophthalmology’s Cornea Knowledge Base Committee, the Co-Chairman of the Midwest Cornea Association and the Cornea Representative on the American Academy of Ophthalmology’s Digital Media Committee. He is conducting research in many areas of Ophthalmology and is the co-editor of a ophthalmic trauma textbook with Dr. Douglas Lazzaro, and is serving on the editorial board of 2 ophthalmic journals.

In the last 12 months I have published 9 Pubmed-indexed papers, in addition to book chapters and other publications. My invited Journal of Neuroscience article (part of my 2014 Science Educator Award from the Society for Neuroscience) was just published, and on its strength I was invited to write a follow-up article for Scientific American (the flagship magazine), with Stephen Macknik as co-author. Over this same time period, I also participated as invited or keynote speakers in many conferences and events, such as at the Gordon Research Conference on Eye Movements, the IBM Brain Day, and various others, in addition to a number of institutional lectures (University of Maryland, NYU Psychology, NYU Neurology, SUNY Optometry). I am invited to speak at a mini-symposium in the upcoming ARVO meeting, and at the Optical Society of America’s Fall Vision Meeting. Also, I have been invited to Co-Chair the 2019 European Conference on Eye Movements (>800 attendees, hosted bi-annually).
We are continuing our extensive research into glaucoma and its pathophysiology. We are learning about the microbiome and its potential role in the disease process. Corneal limbal stem cell expansion is another focus of our efforts, and we have successfully demonstrated expansion and survival of these progenitor cells with our ex vivo techniques. Work in vision neuroscience continues to be a main focus of our efforts as well and we have grown in this area. Lastly, we are active clinical researchers and always looking at ways we can contribute to the scientific literature in a meaningful and productive way.

Glaucoma is a family of diseases that affect axons and the cell bodies of the retinal ganglion cells (RGCs). Glaucoma is usually related to elevation of intraocular pressure (IOP) and results in RGC loss. Despite recent advances in identifying genes related to glaucoma our understanding of the pathophysiology of the disease is still limited. In addition, our current therapeutic interventions are all aimed at decreasing IOP in an effort to slow down progressive damage. We currently lack the ability to reverse any RGC losses.

His research has as a long-term objective to find a cure for glaucoma. To achieve this goal his research efforts over the past year have focused in the following areas:

1) Improving our understanding of the disease pathophysiology. To better understand the disease process, Dr. Danias uses animal models of glaucoma. Using spontaneous (DBA/2J) mouse models of glaucoma, he has confirmed that the innate immune system affects glaucomatous pathology. He has also shown that the effect is different in males and females. This is important as different strategies may be needed to counteract damage from the disease in the two genders.

2) Dr. Danias has also been studying the contribution of tissue plasminogen activator (tPA) – an enzyme that facilitates clot removal - in the pathogenesis of steroid induced and more broadly open angle glaucoma. He has recently shown that tPA administration in sheep with steroid induced intraocular pressure (IOP) elevation normalizes IOP. He is currently investigating how this effect occurs and whether it can be harnessed for therapeutic purposes.

3) Understanding the role of the environment in the development and progression of glaucoma and specifically how environmental factors affect the disease. Dr. Danias has previously published data that links peripheral inflammation (i.e. inflammation outside of the eye) with glaucoma. In the past year he has analyzed data from a cohort of patients that he has recruited for a gene-environment interaction in glaucoma study. Interestingly, the results suggest that dental health is correlated to glaucoma status and that periodontal disease may contribute to glaucoma development or progression. Results from an unrelated cohort partially confirm these observations lending support to the notion that environmental factors and specifically peripheral infections may be more important to glaucoma than initially thought. Such a finding may have potentially huge implications for the treatment of glaucoma and possibly other neurodegenerative disease.

4) Understanding the role of the cerebrospinal fluid (CSF) in glaucoma. CSF pressure is known to be decreased in glaucoma. However, it is unclear how this contributes to pathology. Dr. Danias has been investigating the role of CSF flow in the area of the optic nerve head in an effort to understand how low CSF pressure in that area may impact glaucomatous pathology.
During the last 12 months, I have continued to serve in various editorial boards and in my capacity as Regular Member of the NIH’s Cognition and Perception (CP) Study Section. Last September, I participated as panelist (1 of 5 scientists) in a round table at Georgetown University, in which His Majesty King Felipe VI of Spain spoke as guest of honor. I have applied for several federal and foundation grants, both as PI and Co-PI, some of which are currently under review.

Dr. Susana Martinez-Conde
Professor of Ophthalmology


Dr. Stephen Kaufman
Vice-Chair and Director of Cornea and Refractive Surgery

Corneal stem cell deficiency can be the result of congenital disorders, autoimmune disorders, or secondary disorders that lead to corneal limbal stem cell deficiency, such as: neurotrophic corneal conditions, keratitis, trauma, limbal surgery, chemical toxicity, chemical burns, thermal burns, ocular cicatricial pemphigoid, Stevens-Johnson disease, contact lens wear, ocular rosacea, corneal intraepithelial neoplasia, limbal cryotherapy. Numerous techniques have been described to replace corneal stem cells, which are required to produce a normal new corneal surface epithelium. Cryopreservation techniques have been widely used clinically to preserve cells for in-vitro fertilization and other tissue transplantation. There are currently no validated protocols for cryopreserving human corneal stem cells. Attempts at cryopreservation, using human corneal stem cells, have resulted in low cell viability or loss of stem cell characteristics. Previous reports have only investigated the acute cell death immediately post-thaw, without addressing the delayed cell death, which can be significant (30-50%). We propose to investigate the cryopreservation and tissue banking of corneal limbal stem cells. A multidisciplinary approach combining stem cell characterization, computational and microspectroscopic techniques, will be employed to determine the optimal cryogenic conditions for the storage of both corneal limbal stem cells and corneal ex vivo expansion grafts on amniotic membrane. Thus, the goals of this R21 project are to optimize cryopreservation protocols for donor cornea stem cells and expanded stem cell cultures, specifically, to evaluate the corresponding: (1) freeze damage (ice crystal formation by low-temperature Confocal Raman microspectroscopy and DNA breakage), (2) acute and delayed-onset cell death, and (3) cell proliferation after cryopreservation. The cryopreserved samples will be subjected to extensive characterization of cornea stem cells by (1): cDNA microarray, (2) air-lifting culture and (3) colony-forming assays to evaluate the potential impact of the cryopreservation process on stem cell differentiation. If successful, cryopreservation and banking autograft corneal stem cell tissue would provide a practical clinical source of corneal limbal stem cells for all patients, who could benefit from stem cell expansion graft tissue as individuals with unilateral disease or from living relatives. After our promising pilot projects, this new proposed research seeks to develop a safe, reliable and practical method to store corneal limbal stem cell explants and tissue culture stem cell expansions in a biocompatible, acceptable media, which could be used by our eye bank system to benefit patients.

Dr. Roman Shinder
Director of Oculoplastic, Associate Professor

Corneal stem cell deficiency can be the result of congenital disorders, autoimmune disorders, or secondary disorders that lead to corneal limbal stem cell deficiency, such as: neurotrophic corneal conditions, keratitis, trauma, limbal surgery, chemical toxicity, chemical burns, thermal burns, ocular cicatricial pemphigoid, Stevens-Johnson disease, contact lens wear, ocular rosacea, corneal intraepithelial neoplasia, limbal cryotherapy. Numerous techniques have been described to replace corneal stem cells, which are required to produce a normal new corneal surface epithelium. Cryopreservation techniques have been widely used clinically to preserve cells for in-vitro fertilization and other tissue transplantation. There are currently no validated protocols for cryopreserving human corneal stem cells. Attempts at cryopreservation, using human corneal stem cells, have resulted in low cell viability or loss of stem cell characteristics. Previous reports have only investigated the acute cell death immediately post-thaw, without addressing the delayed cell death, which can be significant (30-50%). We propose to investigate the cryopreservation and tissue banking of corneal limbal stem cells. A multidisciplinary approach combining stem cell characterization, computational and microspectroscopic techniques, will be employed to determine the optimal cryogenic conditions for the storage of both corneal limbal stem cells and corneal ex vivo expansion grafts on amniotic membrane. Thus, the goals of this R21 project are to optimize cryopreservation protocols for donor cornea stem cells and expanded stem cell cultures, specifically, to evaluate the corresponding: (1) freeze damage (ice crystal formation by low-temperature Confocal Raman microspectroscopy and DNA breakage), (2) acute and delayed-onset cell death, and (3) cell proliferation after cryopreservation. The cryopreserved samples will be subjected to extensive characterization of cornea stem cells by (1): cDNA microarray, (2) air-lifting culture and (3) colony-forming assays to evaluate the potential impact of the cryopreservation process on stem cell differentiation. If successful, cryopreservation and banking autograft corneal stem cell tissue would provide a practical clinical source of corneal limbal stem cells for all patients, who could benefit from stem cell expansion graft tissue as individuals with unilateral disease or from living relatives. After our promising pilot projects, this new proposed research seeks to develop a safe, reliable and practical method to store corneal limbal stem cell explants and tissue culture stem cell expansions in a biocompatible, acceptable media, which could be used by our eye bank system to benefit patients.
I have been involved in ongoing clinical research regarding the anatomical changes seen in the neurosensory retina in Parkinson disease patients. We are now examining the associated changes in the blood vessels supplying the fovea. I’m serving as a Principal Investigator in a Phase 3 clinical trial sponsored by Allergan, examining the safety and efficacy of Abicipar Pegol in patients with neovascular age-related macular degeneration (AMD), diabetic retinopathy, and all other retinal vascular diseases. I have a special interest in the surgical management of vitreoretinal diseases including macular holes, epiretinal membranes, and complex retinal detachments.

Dr. Agemy has authored numerous peer-reviewed articles and has presented his work nationally and internationally. He also serves as a reviewer for scientific ophthalmic journals including the journal of Investigative Ophthalmology and Visual Science (IOVS). One of his research interests includes retinal imaging. Dr. Agemy was lead author of a paper on imaging diabetic retinopathy using optical coherence tomography angiography, published in one of the most prominent ophthalmic journals.

Dr. Steven Agemy

Steven Agemy, MD received his medical degree from Wayne State University School of Medicine after graduating from Michigan State University. He completed his Ophthalmology residency at the Kresge Eye Institute/ Wayne State University in Detroit, Michigan. As a resident, Dr. Agemy was an Ambassador to the American Academy of Ophthalmology in Washington DC, advocating to congress on behalf of the Michigan Society of Eye Physicians and Surgeons. He was also chosen to be Chief Resident during his residency, an honor bestowed on him by his peers and the department’s chairman. Following residency, Dr. Agemy completed a two-year fellowship in vitreoretinal surgery at the prestigious New York Eye and Ear Infirmary.

Dr. Agemy is a board certified ophthalmologist and specializes in medical and surgical management of vitreoretinal diseases. He is a member of the American Academy of Ophthalmology, American Society of Retina Specialists, and the Association in Research of Vision and Ophthalmology. He has expertise in diagnosing and managing diseases of the retina including age-related macular degeneration (AMD), diabetic retinopathy, and all other retinal vascular diseases. He has a special interest in the surgical management of vitreoretinal diseases including macular holes, epiretinal membranes, and complex retinal detachments.

Dr. Allison Rizzuti

Dr. Rizzuti is a board certified ophthalmologist who specializes in cataract surgery and cornea/external disease. A Brooklyn native, Dr. Rizzuti graduated from Barnard College and then returned to Brooklyn for her medical training. After completing medical school and residency in ophthalmology at SUNY Downstate, Dr. Rizzuti trained as Downstate’s first fellow in cornea and refractive surgery under Dr. Stephen Kaufman. She was elected for the Alpha Omega Alpha National Medical Honor Society in 2014.

Dr. Rizzuti is a member of The American Academy of Ophthalmology and The Cornea Society. She had authored numerous peer-reviewed papers, and her research has been presented at the Association for Research in Vision and Ophthalmology annual meeting in 2012 and 2015.

Dr. Rizzuti is director of resident education at Kings County Hospital Center where she also takes an active role in their clinical and surgical training.
Two annual series of lectures presented by SUNY Downstate Department of Ophthalmology

The Visiting Speaker Clinical Lecture Series and the Vision Science Seminar Series of Research Lectures — a forum for renowned clinicians and researchers to present their latest findings.

These lectures highlight advances in many areas of clinical ophthalmology and ophthalmic research, and are presented by noted ophthalmologists and clinical and basic scientists from throughout the United States and abroad. Ample opportunity is provided for questions and answers.

Most programs are held in Classroom 1A at SUNY Downstate Medical Center. For your convenience, there is valet parking at the main entrance of University Hospital of Brooklyn, 445 Lenox Road.

Please join us for these insights into the latest, most current topics in ophthalmology. No registration is required.

COURSE DIRECTORS
Douglas R. Lazzaro, MD, FACS, FAAO
Professor and Chair, Department of Ophthalmology, The Richard C. Troutman, M.D. Distinguished Chair in Ophthalmology and Ophthalmic Microsurgery, Comprehensive Ophthalmology and Cornea

John Danias, MD, PhD
Professor of Ophthalmology and Cell Biology, Vice-Chair of Research and Director of Glaucoma

The entire CME lecture series can be viewed on our website www.downstate.edu/ophthalmology
SUNY Downstate Medical Center Department of Ophthalmology

LECTURESHIPS

Named Annual Talks

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<td>Austin Fink, MD</td>
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SUNY Downstate Medical Center Department of Ophthalmology Presents

44th Annual Ophthalmology Alumni Meeting

JUNE 9 2016
8:00AM – 4:10PM
SUNY Downstate Medical Center Alumni Auditorium
395 Lenox Road Brooklyn, NY 11203

Course Director: Douglas R. Lazzaro, MD, FACS, FAAO
Sponsored by the Office of Continuing Medical Education
For Registration Call Beatrice PierreFrancoeur (718) 245-5460

PROGRAM

8:00 AM  Breakfast and Registration
8:55 AM  Welcome  Dr. Douglas Lazzaro
9:00 AM  Lecture: TBD  Dr. Jay Pepose
9:15 AM  Ophthalmoscopy in the 21st Century  Dr. Valerie Biousse
9:30 AM  Ultrahigh Resolution OCT of Foveal Disorders  Dr. Elias Reichel
9:45 AM  Glaucoma Screening–Is it Really a Good Idea?  Dr. Michael Boland
10:05 AM  Stevens Johnson Syndrome  Dr. James Chodosh
10:20 AM  The Richard C. Troutman, MD 15th Annual / Lecture: TBD  Dr. Jay S. Pepose
10:45 AM  BREAK / EXHIBITS
11:35 AM  Update on Idiopathic Intracranial Hypertension  Dr. Valerie Biousse
11:50 PM  Resident Case Presentations / Q & A
12:15 PM  LUNCH / EXHIBITS
1:40 PM  Electronic Health Records Overview in Ophthalmology  Dr. Michael Boland
2:05 PM  Retinopathy  Dr. Elias Reichel
2:20 PM  HSV Keratitis  Dr. James Chodosh
2:40 PM  Acute Retinal Ischemia: An Emergency often Ignored  Dr. Valerie Biousse
2:55 PM  Lecture: TBD  Dr. Jay Pepose
3:10 PM  Drugs in Development for Dry ARMD  Dr. Elias Reichel
3:30 PM  Resident Case Presentations / Q & A
4:00 PM  MEETING ADJOURNED
Dr. Konstantin Astafurov was born in Saint-Petersburg, Russia, where he attended the Institute of Aerospace Instrumentation majoring in Computer Science before immigrating to the US at the age of twenty one. He then attended CUNY Brooklyn College with a concentration in Chemistry and graduated summa cum laude.

Dr. Astafurov was then accepted into a combined MD/PhD program at SUNY Downstate. His PhD thesis was done in the laboratory of Dr. John Danias and was devoted to studying the effects of systemic inflammation on glaucoma and resulted in several published papers. He also served as a vice-president of Graduate School Student Council. During medical school Dr. Astafurov was involved in teaching high school students at Health Science Academy at Arthur Ashe Institute and volunteering at the Brooklyn Free Clinic. Currently, he is finishing a preliminary internal medicine year at Maimonides Medical Center. He continues his research in glaucoma focusing on the role of oral microbiome and dental health in glaucoma pathogenesis and on discovery of novel risk factors for glaucoma. He is excited to continue being a part of Downstate community and pursue his Ophthalmology training in combination with his research endeavors at Downstate.

Dr. Arpine Barsegian was born in Yerevan, Armenia and moved to the United States when she was 3 years old. She graduated Stuyvesant High School, and then attended The Sophie Davis School of Biomedical Education, a 7 year combined B.S/M.D. program with SUNY Downstate Medical Center. She graduated AOA, and went on to complete her internal medicine preliminary year at Maimonides Medical Center. During her undergraduate years, she was avidly involved in pharmacological breast cancer research, investigating the effects of Hydrogen sulfide-releasing aspirin on estrogen receptor negative breast cancer cells in vitro and in vivo, a paper that she published and presented at the 2011 Annual Meeting of the American Association of Cancer Research. She was awarded the Rudin Research Fellowship as well as the Mack Lipkin Broader Horizons Fellowship, which funded a research fellowship in Paris, France in Hopital Saint Louis; there, she analyzed the susceptibility of cardiac stem cells to natural killer cell lysis.

Her years in SUNY Downstate Medical Center exposed her to ophthalmology and she became an active member of the SUNY Downstate Medical School Ophthalmology Club. She also participated in ophthalmologic research in SUNY Downstate and The New York Eye and Ear Infirmary, presenting a poster regarding the Phenytoin test in Blepharoptosis at the 2015 Fall Meeting of the American Society of Oculoplastic Surgeons. She is fluent in Armenian, Russian, English and Spanish and is thrilled to be a member of the Downstate Ophthalmology Residency Program.
Dr. Gurdeep Jhaj was born and raised in Southern California. He attended University of Southern California on a full tuition scholarship where he majored in Biological Sciences, minored in Popular Music Studies, and graduated Magna Cum Laude. In his second year at USC, Dr. Jhaj was accepted in SUNY Upstate Medical University’s early assurance program for medicine. After graduating from USC in 2011, he migrated to Syracuse, NY to pursue his medical degree at SUNY Upstate.

In medical school, Dr. Jhaj was involved in a variety of activities that cultivated his interests in Ophthalmology, which included volunteering at the free Eye Care Community Clinic in Syracuse and working with a medical mission group in Northern India that provided free eye care in an underserved area. He also participated in research with the University Vision Care and Research Center at SUNY Upstate under Dr. William Brunken. His research focused on the corneal wound healing and the roles of specific extracellular matrix molecules involved in epithelial proliferation.

Currently, Dr. Jhaj is completing his intern year in Internal Medicine at Eisenhower Medical Center in Rancho Mirage, CA. He is excited to be joining the Downstate Ophthalmology family in epithelial proliferation.

Dr. Matthew Karl was born and raised in Long Island, New York. He graduated from Georgetown University and SUNY Downstate College of Medicine, where he was inducted into the Alpha Omega Alpha Honor Society.

He completed his internship at Memorial Sloan Kettering Cancer Center, where his research included examining the effect of intravitreal chemotherapy on intraocular pressure in children with retinoblastoma, which he presented at ARVO in Seattle, as well as improving the quality of goals of care discussions in the inpatient setting.

Anthony Parendo, M.D. was raised in Minneapolis, Minnesota and attended the University of Wisconsin, where he obtained a Bachelor of Science in Genetics. While pursuing his undergraduate degree, he worked as a caregiver for individuals with developmental disabilities and participated in research in the Department of Genetics at UW. Anthony earned his medical degree from Sidney Kimmel Medical College of Thomas Jefferson University in Philadelphia. During this time, he worked under Doctors Carol and Jerry Shields at Wills Eye Hospital investigating treatments for ocular malignancies including choroidal melanoma and retinoblastoma. He remained active in medical outreach, volunteering to provide ophthalmic and primary medical care to Philadelphia’s homeless population. After graduating from medical school, Anthony completed a Transitional Year Residency at the University of North Dakota before beginning his residency training in ophthalmology at SUNY Downstate Medical Center.

In his free time, Anthony enjoys downhill skiing, film, live music, and spending time with his family and friends. He is passionate about ophthalmology and feels privileged to provide a high level of medical care to his patients.

Dr. Joseph "Jamie" Raevis will be an ophthalmology resident at SUNY Downstate Medical Center, beginning in the summer of 2016. Born and raised in Fair Haven, New Jersey alongside his two bothers, he graduated from The College of New Jersey with a biology degree. He then attended Georgetown University School of Medicine and is currently completing his medical internship at SUNY Downstate Medical Center.

He is excited to be back in the tri-state area where he now lives in Brooklyn, NY with his girlfriend and wheaten terrier puppy. His free time is spent rock climbing, hiking, camping, and canoeing with the Outdoors Club of which he has been a member since 2007. As an undergrad, Joseph also taught a few classes and developed quite a passion for teaching. He hopes to continue to cultivate this passion as he pursues a career in academics.

At the age of 6, after the collapse of the Soviet Union, Alexander Pinhas emigrated from Uzbekistan to New York with his family. They faced economic hardship while adjusting to a new culture and language. Nevertheless, Alex excelled academically gaining entry into the highly competitive Stuyvesant High School. He was a varsity wrestler, volunteered at a local hospital and did an Intel summer research project. Through his studies Alex discovered the extraordinary philosophy of Louis Brandeis, who believed that the ultimate purpose of education is to promote the welfare of humanity. Brandeis’ words kindled an aspiration within Alex, bridging his love for biology with his admiration toward medicine, to educate himself to one day improve the health of others.

Alex attended the Macaulay Honors College at Queens College where he majored in Biology with a concentration in Neuroscience research, minored in Chemistry and Anthropology and volunteered at St. Vincent’s Hospital. During his neuroscience courses, Alex became interested in the sense of vision, and restoring visual function became the ultimate purpose of his academic and humanitarian aspirations.

While at Icahn School of Medicine at Mount Sinai, Alex helped found an organization for health screening and education in children and the elderly, with a focus on vision health, and held leadership roles at the annual Community Health Fair. During his scholarly years, Alex worked at the New York Eye and Ear Infirmary of Mount Sinai as a pioneer developer of a technology for imaging the retinal microvasculature and exploring its clinical application. As Alex embarks on the journey of ophthalmology residency at SUNY Downstate, his interest in the sense of vision and profound appreciation for its importance motivates him to work towards alleviating ophthalmic ailments through clinical practice as well as research.
DEPARTMENTAL PUBLICATIONS

2015


Chintala H, Kupaka I, Yan I, Lau L, Grant B, Chauquet B. The matricellular protein CCN1 controls retinal angiogenesis by targeting VEGF, Src homology 2 domain phosphatase-1 and notch signaling. Development.


Deutch CH, Symonds D, Kerr M, Terrienon KY, Bergqvist M, Xie Y, Danias J, Stamper WD, Sharfstein ST. A model to study outflow physiology, glaucoma pathology and high-pressure drug screening. Biomaterials.


Kelly A, Kaufman SC. Corneal endothelial cell loss and iritis associated with a new cosmetic iris implant. JAMA Ophthalmol.

Krupski I, Bruford EA, Chaoaur Ch. Eying the Cyto/CTGF/NOV (CCN) group of genes in development and diseases: highlights of their structural likeness and functional discontinuities. Hum Genomica.


Martinez-Conde S, Macknik SL. From Exploration to Fixation: An Integrative View of Yarbus’s Vision. Perception.


Slotnick S, Ding Y, Glazman S, Durbin M, Selesnick I, Sherman J, Bodis-Wollner I. The avascular zone and retinal biomarker for Parkinson’s disease: Quantifying the foveal pit with optical coherence tomography. Mov Disord.


ARVO ABSTRACTS
2015

48 - A0037 Circulating MicroRNA (miRNA) Expression Signatures in Type 1 diabetic (T1D) Individuals Protected from Development of Diabetic Retinopathy (DR)
Maria B. Grant, David Kent, Robert N. Mames, Ashay D. Bhatwadekar, L Yan, H Chintala, Brahim Chaqour

2544 - C0104 Differential effects of C1q ablation on glaucomatous damage in the two sexes in DBA/2 mice
Ruma Kumari, Alina Genis, Konstantin Astafurov, Camilo Galeano, John Danias

403 - D0120 Type-2 Diabetes Alters the microRNA Expression Profiles of Progenitor Cell Populations
Lulu Yan, Hemabindu Chintala, Ashay D. Bhatwadekar, Sugata Hazra, Maria B. Grant, Brahim Chaqour

Program moderated by Dr. John Danias

ALUMNI NEWS

Dr. Mitchell Drucker

Mitchell Drucker, MD: Presently I am a Professor of Ophthalmology, Neurology, and Neurosurgery at the University of South Florida College of Medicine in Tampa, Florida. I am the Director of the Residency Program in Ophthalmology and the Neuro-ophthalmology Service. I also have the privilege of being the IRB Chairman for Roy Beck’s JAEB Center for Health Research. After graduating from Cornell University I was a medical student at the University of Florida and an intern in Internal Medicine at Brown University. I completed an Ophthalmology Residency at SUNY Downstate Medical center 1983-1986, and was Chief resident from 1985-1986. I did an anterior segment fellowship in Neuro-ophthalmology at Wills Eye Hospital in 1987.

I have been given a Teaching Award by the residents 7 times and have published articles on a number of different neuro-ophthalmologic topics. My clinical interests are in the diagnosis and treatment of Ischemic Optic Neuropathy, Optic Neuritis, Diplopia, Pseudotumor Cerebri and Myasthenia Gravis.

My co-residents at Downstate have become life-long friends with whom I correspond on a regular basis but get to see all too infrequently.

Dr. Mark Lebowitz

Mark Lebowitz--I was born in Brooklyn and grew up on Long Island. I attended Franklin and Marshall College where I majored in Chemistry and graduated with a BA in 1978. I then attended NYU School of Medicine where I obtained my MD in 1982 and met my wife, dermatologist Diane Barson MD. After an internship in internal medicine at Beth Israel Medical Center NY, I did my residency in Ophthalmology at SUNY Downstate Medical center 1983-1986, and was Chief resident from 1985-1986. I did an anterior segment fellowship at Manhattan Eye and Ear 1986-1987 and was resident instructor at MEETH from 1987-1988. I’ve been in private practice in Brooklyn ever since. I am currently senior partner at Kochman Lebowitz and Mogil MDs LLP and medical director of Brooklyn Eye Surgery Center. My major interests are in cataract and refractive surgery, most recently with a particular interest in laser assisted cataract surgery. I have 2 children , one completing an MBA at NYU (son) and one in first year at Cornell medical school (daughter). My personal interests are golf (addict) and physical fitness.
Dr. Renelle Pointdujour Lim

Renelle Pointdujour Lim, MD: a board certified ophthalmologist, earned her medical degree at the State University of New York Downstate Medical Center in 2010. She then completed ophthalmology residency at Downstate Medical Center in 2014. She is currently completing a 2-year clinical oculoplastic fellowship at Wills Eye Hospital. She works under the tutelage of pioneers in the field of ocular oncology, Drs. Jerry & Carol Shields. She will go on to complete a fellowship in oculoplastic and orbital surgery at Wills Eye Hospital.

She has authored and co-authored numerous peer-reviewed articles and two book chapters. She is extremely involved in presenting her research at annual meetings. Dr. Lim enjoys teaching medical students and residents. She is the recipient of several awards including the Peter Vallone Scholarship in Recognition of Academic Excellence, the Endowed Honor Scholarship for Academic Excellence, the Excellence in Ophthalmology Award, and the Doctor’s Award in recognition of dedication and service.

Dr. Lim developed an app called “OphthoBilling,” which integrates Current Procedural Terminology (CPT) and International Classification of Diseases (ICD-10). The app is specifically designed for ophthalmologists and helps to minimize billing errors. Dr. Lim has one daughter and enjoys spending time with her family. She enjoys sports like crossfit, tennis, and swimming.

Dr. Rogelio Orillac

Dr. Rogelio Orillac. I was a resident at SUNY Downstate Medical Center from 1964 to 1968, during Professor Richard C. Troutman’s Tenure. I served as the Chief Resident in the last year of my training. I returned to Panama upon finishing my training to work with Dr. Benjamin F Boyd.

In 1988, because of the political situation in my country, I left everything behind and came back to the United States, where I became an American Citizen. I worked at the Tulane Medical Center eye clinic from 1988 to 1992. In 1992, Louisiana State University appointed me as Associate Professor with Tenure and Director of the Ophthalmology program at E. A. Conway Hospital in Monroe, Louisiana for 20 years. I retired for two years and then the VA in Baton Rouge, LA asked me to become the Director of their eye program which I did for four years. I am presently retired and living in Austin, Texas. During my Tenure at Tulane and LSU, I trained the Residents from Tulane, Ochsner Clinic, LSU and Northwestern University of Chicago.

I was eventually appointed Professor of Ophthalmology at the University of Panama Medical School. After five years in practice with Dr. Boyd, I opened my solo practice. Years later, I built the first eye hospital in the Republic of Panama.

Dr. Ray Reich

Raymond Reich, M.D. was born in Brooklyn, N.Y., where he still lives with his wife, Sue, and where he raised his children. A graduate of Yeshiva University (BA, History), he received his MD degree from the Albert Einstein College of Medicine. After a straight medical internship, he served his residency in Ophthalmology at SUNY Downstate where he graduated in 1977. This was followed with a fellowship in Ophthalmic Plastic and Reconstructive Surgery at Harvard Medical School / Massachusetts Eye and Ear Infirmary.

He is the founder and director of Reich Medical and Surgical Eye Care, LLC in Brooklyn, NY, where he has been in practice by his son, Isaac Reich, M.D., also a SUNY Downstate graduate in the MD program and Ophthalmology.

Dr. Jeanine Suchecki

Jeanine Suchecki MD serves as Associate Professor and Chief of the Division of Ophthalmology at University of Connecticut. Dr. Suchecki received her medical degree and ophthalmology residency training from SUNY Downstate Medical Center. She then completed her cornea and external disease fellowship at University of Connecticut Health Center. Dr. Suchecki entered private practice initially and was then recruited to the University of Connecticut Health Center to develop Ophthalmology. Her interests include cataracts, corneal transplants, ocular manifestations of graft versus host disease and cancer therapies, dry eye disease, contact lens complications, and infectious eye diseases. She has worked closely with Oncology in the advancement of treatment of bone marrow transplant patients with ocular disease.

Dr. Suchecki has been instrumental in the development of the clinical practice as well as ophthalmic education at the University and has a strong interest in education. Dr. Suchecki has lectured at many local, regional, and national conferences. She has served on many committees and councils both at the University and nationally. She has received awards for teaching, achievement from the American Academy of Ophthalmology, as a commissioner for JCAHPO, and has been selected as one of the best doctors of Hartford, and top doctors in Connecticut. Dr. Suchecki is interested in continued development of educational programs and opportunities for the students, growing opportunities in clinical and translational research, and excellence in the Division of Ophthalmology clinical practice.

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Felix Sabates, MD—I was accepted as a 2nd year resident into the SUNY Downstate ophthalmology program. Credit was given from my previous work with Dr. Castroviejo, the 6 months Harvard course as well as being the “unofficial fellow” of Dr. Scheepens for 3 months following the end of the course. I graduated from the Downstate ophthalmology program in 1959.

The Kings County program was in the early stage of development and Morton Rosenthal that was finishing his fellowship in retina and returning to New York was the one that recommended me to Dick Troutman with the support of Dr. Schepens. I was subsequently in the first group of Schepens trained fellows. Bill Tassman reminded me that he did his first buckle under my assistance as the senior fellow.

I have great memories of my time in Brooklyn, including the visit of Ignacio Barraquer and the beginning of the Barraquers lifetime collaborations with Dr. Troutman that brought many advances to the anterior segment surgery world.

My first daughter was born in St John’s hospital in Brooklyn, now closed. In my soon to be completed book, I have many great experiences in our great Country. I never expected or wanted to stay in the US, but the communist takeover in Cuba created an unexpected change in my life resulting in staying in the US which required a special bill thru congress for me to obtain my license in Missouri.

I continue to work in areas of Alzheimer research detection through macula perimetry, macular degeneration, and imaging advances in the diagnosis of diabetes. I leave all the hard work to my son Nelson!

Douglas, I am honored and very proud to have been an early resident in your program.

You make the “old gang of Kings Country” proud of your accomplishments.

Dr. Troutman’s first group of residents
Sitting L-R: Drs. Joel Contreras, Richard C. Troutman, and Paul Bedrossian
Standing L-R: Drs. Paul Pirundini, Paul Chalfin, Marvin Kochman, Martin Feuerman, and Felix Sabates

Dr. Lazzaro procured a $1,000,000 Unrestricted Grant (over 5 years) from two donors in 2015 (who wish to remain anonymous). They were impressed with the vision and direction of the department, and the gift will be used in various ways to support all aspects with departmental need, including resident education, faculty practice, and research.

Dr. Samer Khosrof, Downstate Ophthalmology Graduate 2004, completed a vitreo-retinal fellowship at Tulane and a postdoctoral retinal fellowship at Mass Eye and Ear Infirmary. Dr. Khosrof founded and developed a large private practice in Bay Ridge, Brooklyn and has pledged a $50,000 donation in 2016 (25,000 already received) to the department, funds of which will be used for resident equipment and faculty practice needs. An annual named retina lecture will be held in his deceased sister’s name Jenan.

Dr. Raymond and Sue Reich have donated consistently over the past 5 years to support the department. Their gifts have been unrestricted, and used to benefit resident and faculty initiatives.

Dear Alumna/i,

We need your support and thank you for all your past help and future help. As healthcare dollars continue to shrink, we are increasingly dependent on outside sources of revenue to keep the department stable. With utmost appreciation, DRL
GALLERY 2015-2016

Speakers at Alumni Meeting June 2015 in Troutman Library
L-R: Drs. Stanley Chang, David Abramson, Douglas Lazzaro, Kathryn Colby, and Douglas Koch

Cornea Speakers AC MTG 2016
L-R: Drs. Kaufman, Tu, Lazzaro, and Randleman

Retina Speakers AC Mtg 2016
L-R: Drs. Zrenner, Fine, Del Priore, Lazzaro, and Tsang

Dr. Miguel Burnier teaching residents ophthalmic pathology at Annual AC Mtg

Dr. Douglas Koch delivering the annual Richard C. Troutman Lecture
SUNY Downstate Medical Center
Department of Ophthalmology Presents

Current Concepts in Ophthalmology
2017

VISITING FACULTY
Miguel N. Burnier Jr., MD, PhD
Karl Golnik, MD
Daniel A. Johnson, MD
William R. Katowitz, MD
Nils A. Loewen, MD, PhD
Steven Schallhorn, MD
Mary A. Stefanyszyn, MD
Lucy H.Y. Young, MD, PhD
Marco A. Zarbin, MD, PhD

COURSE DIRECTOR
Douglas R. Lazzaro, MD, FACS, FAAO
Professor and Chair, Department of Ophthalmology, The Richard C. Troutman, M.D. Distinguished Chair in Ophthalmology and Ophthalmic Microsurgery, Comprehensive Ophthalmology and Cornea

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