

*Fifth International
Congress on OCT
Angiography, “en face”
OCT and advances in OCT*

ALBERT AUGUSTIN - GERMANY

Albert Augustin is currently a Professor of Ophthalmology and Chairman of the Department of Ophthalmology at the Klinikum Karlsruhe, Germany. Prior to this, he was Professor of Ophthalmology at the University of Mainz where he was Head of the Laboratory for Pathophysiology of the Eye and Assistant Medical Director at Bonn University Eye Hospital. Professor Augustin has been the recipient of numerous awards and has published a number of books and over 180 papers. His main research activities relate to retinal imaging as well as pathobiochemistry and pathophysiology of inflammation and oxidative damage in/to the eye in age-related macular degeneration (AMD), diabetic retinopathy (dR), diabetic macular edema (DME), proliferative vitreoretinopathy (PVR), and retinal ischemia. In addition, his research group has proven and quantified the significant role of inflammation in the pathogenesis of AMD, dR, DME and PVR. He also established a combination therapy for wet AMD, diabetic macular edema and initiated trials investigating the efficacy and safety of Triple Therapy in AMD.



STEVEN BAILEY – USA

Steven Bailey is an associate professor of ophthalmology at the Casey Eye Institute, Oregon Health and Science University in Portland, USA.

He specializes in medical and surgical diseases of the retina and vitreous.

His interests include optical coherence tomography angiography, carotenoids in age-related macular degeneration, surgical delivery of stem cells and gene therapy, and the training of vitreous and retinal surgeons.



FRANCESCO BANDELLO - ITALY

Professor and Chairman at the Department of Ophthalmology at University Vita-Salute, Scientific Institute San Raffaele, Milan, Italy. He is Academic Dean of “Corso di Laurea Specialistica/Magistrale in Medicina e Chirurgia” at the same University. Professor Bandello is Past-President of EURETINA, President of Academia Ophthalmologica Europea and Vice-President of EuroLam. He is Co-Editor of the European Journal of Ophthalmology and former board member of the Club Jules Gonin and Macula Society. He is member of Executive Board of ESASO (European School for Advanced Studies in Ophthalmology) Foundation, member of the Academia Ophthalmologica Internationalis and the Accademia Nazionale di Medicina. Prof. Bandello is co-author of 10 books and he serves as a peer reviewer for grant applications for the NEI. He has authored or co-authored 400 Pub-Med articles.



CAROLINE R. BAUMAL - USA

Brilliant young clinician and surgeon, Associate Professor of Ophthalmology at New England Eye Center, Tufts Medical Center in Boston, MA. She specializes in diseases and surgery of the retina and vitreous. Her research interests include novel retinal imaging and diagnostics, drug development and delivery to the posterior segment. First retina fellowship at New England Eye Center in 1995 with Carmen Puliafito. Her clinical interests include age-related macular degeneration, diabetic retinopathy, complex vitreoretinal surgery and retinopathy of prematurity.

Dr. Bauml has authored over 100 peer-reviewed papers and 25 book chapters on retinal diseases. She is actively involved in teaching vitreoretinal fellows and residents and was previously Director of the residency program. She lives in Boston with her family of 3 young boys who consistently improve her stamina and patience!





JOSEFF CARROLL – USA

Joseph Carroll, PhD is the Richard O. Schultz, MD / Ruth Works Professor of Ophthalmology, and Professor of Biophysics and Cell Biology, Neurobiology & Anatomy at the Medical College of Wisconsin and an Adjunct Professor of Biomedical Engineering at Marquette University. Dr. Carroll directs the Advanced Ocular Imaging Program (AOIP), which utilizes a variety of retinal imaging tools to study the structure and function of the living human retina with cellular resolution. The group has worked to develop novel image analysis approaches to increase the scientific and clinical utility of these imaging devices, and has pioneered the dissemination of this technology to research groups around the world. Dr. Carroll and his team have been at the forefront of the clinical application of adaptive optics retinal imaging, with over 100 peer-reviewed publications.



SALOMON Y. COHEN - FRANCE

Bright clinician and teacher, he organizes every year two important meetings on retinal diseases and on AMD. Salomon Y. Cohen received his MD from Paris University in 1990. He performed most of his ophthalmology residency in departments specialized in retina, and his fellowship at the Creteil University Eye Clinic, chaired by Professor Gabriel Coscas. He completed a master in biology and a PhD in Neurosciences. He is currently practicing as Retina specialist in private practice and in the department of ophthalmology of Creteil (Professor Souied). He authored 8 books devoted to fluorescein angiography, indocyanine green angiography, ageing eye, age-related macular degeneration, low vision rehabilitation, and Retina. He authored more than 140 papers, most of them in peer-reviewed international journals. He is associate Professor in the

University of Creteil.



GABRIEL COSCAS - FRANCE

He is a pioneer in Fluorescein Angiography, Retinal Laser treatment, ICG Angiography, Retinal Imaging. He is teaching Imaging in Ophthalmology. He is also a pioneer in the development of clinical applications for OCT Angiography. Gabriel Coscas was trained at University of Paris. He established Department of Ophthalmology in 1970 in Créteil (University Paris XII) and served as Professor of Ophthalmology and Chairman until 1999. President of French Retina Society He devoted most of his activity on macular diseases. Dr Coscas was a founding Member of ACADEMIA EUROPEA OPHTHALMOLOGICA and serve as First Vice President from 2005. Founding member of Global Alliance against Trachoma at WHO.

He has been a pioneer and teacher in Fluorescein Angiography, Retinal Laser treatment, ICG Angiography, Retinal Imaging.

He received many awards and lectures, including the Oxford Lecture and Award, 1990; the Jules Stein Lecture and Award, 1992; the Michaelson Lecture and Award, 1995; Lecturer Nara, Japan, 1995; the Award of Merit of the Retina Research Foundation, at the Jules Gonin Club meeting, in Bern in 1996; the JDM. Gass Medal at the Macula Society (1996); the Tunisian Ophthalmological Society Gold Medal (1995); the Mediterranean Ophthalmological Society Gold Medal and Award 1998; the Jules François Lecture in Paris 2001; the Gold Medal of the Algerian Society of Ophthalmology (2005 the Academia Ophthalmologica Internationalis Lecture, Jerusalem; the Gold Medal of the Algerian Society of Ophthalmology (2005); the EURETINA Lecture in Barcelona, in 2007.

Honor Member of Club Jules Gonin, (1998) and Honor Member of La Société Française d'Ophthalmologie (1998); and Honor Member of Instituto Barraquer in Barcelona, 2002. He was honored as first recipient of the "Gabriel COSCAS Medal" 2001, founded in Rome by Bruno Lumbroso, and of the "Gabriel Coscas Lecture" and Award, founded in Paris - Macula Meeting 2002. Commandeur de la Légion d'honneur » by the Président de la République Française.



KARL CSAKY - USA

Dr. Csaky is the T. Boone Pickens Director of the Clinical Center of Innovation for Age-Related Macular Degeneration, Managing Director and Chief Medical Officer of the Retina Foundation of the Southwest and a partner at the Texas Retina Associates. His main area of interest is studying both clinical and drug delivery research in AMD. Dr. Csaky is involved in various clinical trials on dry AMD, is studying vision function assessments of patients with various stage of AMD and OCT Angiography clinical applications.

**LUCA DI ANTONIO - ITALY**

Brilliant young clinician interested in Imaging and retinal diseases. Medical degree in 2002 from University "G. d'Annunzio" of Chieti-Pescara, Italy and residency in 2006 at the Ophthalmology Clinic, National Center of High Technology in Ophthalmology, Hospital of Chieti. PhD degree in 2010 from University "G. d'Annunzio" of Chieti-Pescara, Italy. He completed his fellowship in medical retina in 2012 at the Clinical Hospital of Chieti.

His clinical research interests are focused on vitreoretinal diseases and glaucoma. He is a Retina Consultant at the Ophthalmology Clinic, University "G. d'Annunzio" of Chieti-Pescara, Italy. His interests cover many fields of ophthalmology including retina, glaucoma and low vision. He is co-investigator in several clinical trials adherent to the principles of good clinical practices. He is

author and coauthor of numerous scientific papers in peer reviewed Journals. He is author and co-author of several textbooks and reviewer of several Ophthalmology Journals. He is a member of the Italian Association of Ophthalmology and the European Society of Retina Specialists, and a founding member of Italian Society of OCT Angiography.

**WOLFGANG DREXLER - AUSTRIA**

Wolfgang Drexler received his MS and PhD in Electrical Engineering in 1991 and 1995, respectively, at the Technical University of Vienna, Austria. From 2006 to 2009 he was a Full Professor of Biomedical Imaging at the School of Optometry and Vision Sciences at Cardiff University, Wales, UK. Since 2010 he is an Honorary Distinguished Professor at Cardiff University, UK. Since October 2009 he is a Full Professor of Medical Physics and the Head of the Center for Medical Physics and Biomedical Engineering at the Medical University of Vienna. He spent 2 years at the Massachusetts Institute of Technology (MIT), Cambridge, USA, received the Austrian START Award from the Austrian Science Fund in 2001, the COGAN Award from ARVO in 2007, the Fear Memorial Award in 2008, the Gabriel Coscas Medal in 2009, the EVER Acta Silver Medal in 2010, the DOG's

Innovator's Award in 2011 as well as the Edridge Green Medal from The Royal College of Ophthalmologists in 2012. He is a member of the Austrian Academy of Science and has published more than 180 publications (including Nature Medicine and PNAS) in peer reviewed journals and is first, co-author or corresponding author of more than 600 conference proceedings or abstracts resulting in a h-index of 49. He is (Co)Editor of 12 books, including two editions of "Optical Coherence Tomography: Technology and Applications" (2008 and 2015). Wolfgang Drexler gave more than 220 invited or keynote talks since 2000 and has accomplished more than € 13 million research grant income.

**ADIL EL MAFTOUHI - FRANCE**

He is a brilliant young specialist in Ocular Imaging technology and clinical applications, especially in OCT, OCTA and Ultrasound . He obtained Orthoptic degree from the Medical university of Paris VI in 2001. He is a praticien hospitalier in 15-20 Hospital since 2001 .

Adil EL MAFTOUHI's clinical and research interest in imaging techniques in anterior and posterior segment .He has authored several publications in peer reviewed journal and Co author of several OCT books

Co-director of the Centre Ophthalmologique Rabelais in Lyon France

**K. BAILEY FREUND - USA**

He is a great expert in retinal imaging and diagnostically challenging and rare conditions. He specializes in macular degeneration, diabetic retinopathy, and retinal vascular diseases. He described and classified pachychoroid disorders. K. Bailey Freund, MD graduated at Williams College and the New York University School of Medicine and completed his residency training in general ophthalmology and fellowship in medical and surgical retina at the Manhattan Eye, Ear, and Throat Hospital. He is an expert in retinal imaging and diagnostically challenging and rare conditions. He specializes in macular degeneration, pachychoroid disorders, diabetic retinopathy, and retinal vascular diseases. He for those reasons he routinely evaluates patients and images from around the world. Dr. Freund has initiated and conducted many clinical trials for treatments for retinal diseases. He is a Clinical Professor of Ophthalmology at New York University School of Medicine. He is a senior partner at Vitreous Retina Macula Consultants of New York, a single-specialty group with ten retinal physicians as well as a multitude of international fellows.

He has authored over 300 peer-reviewed scientific manuscripts and has written numerous books and book chapters, most notably the second edition of The Retina Atlas. He has received numerous awards including the Young Investigator Award from the Macula Society and the Senior Achievement Award from the American Academy of Ophthalmology.



JAMES FUJIMOTO - USA

James G. Fujimoto is a superior mind and is at the basis of modern ophthalmology developments. Along with collaborators, he has pioneered the development of optic coherence tomography (OCT). OCT has had a dramatic impact in ophthalmology, where it has become a standard of care for evaluating disease progression and assessing treatment response in diabetic retinopathy, glaucoma and age-related macular degeneration. OCT is also proving to be a powerful tool in intravascular imaging to identify unstable plaques prone to rupture and guide treatment. OCT continues to be integral in diverse areas where Professor Fujimoto is leading fundamental and clinical research. He is a professor in the Department of Electrical Engineering and Computer Science at the Massachusetts Institute of Technology. He received his SB, SM and PhD in electrical engineering from MIT. His research areas include studies of ultrafast phenomena, biophotonics and biomedical optical imaging. His research group in the

MIT Research Laboratory of Electronics, along with collaborators, has pioneered the development of optic coherence tomography (OCT). An author of more than 300 journal articles, Fujimoto is the editor or author of several books and holds numerous US patents. He is a member of the National Academy of Engineering, National Academy of Science and the American Academy of Arts and Science. Fujimoto is also co-founder of a startup companies that developed OCT for ophthalmic and intravascular imaging.

OCT has had a dramatic impact in ophthalmology, where it has become a standard of care for evaluating disease progression and assessing treatment response in diabetic retinopathy, glaucoma and age-related macular degeneration. OCT is also proving to be a powerful tool in intravascular imaging to identify unstable plaques prone to rupture and guide treatment. OCT continues to be integral in diverse areas where Professor Fujimoto is leading fundamental and clinical research.



DAVID HUANG - USA

Dr. Huang is a co-inventor of optical coherence tomography (OCT), the most common imaging procedure in ophthalmology, with an estimated 30 million patients imaged per year. His seminal article on OCT, published in *Science* in 1991, has been cited more than 10,000 times. He is inventor with Yali Jia of SSADA technology of OCT Angiography. Peterson Professor of Ophthalmology, Professor of Biomedical Engineering, and Director of the Center for Ophthalmic Optics and Lasers at the Oregon Health & Science University (OHSU). Dr. Huang is a co-inventor of optical coherence tomography (OCT), the most common imaging procedure in ophthalmology, with an estimated 30 million patients imaged per year. His seminal article on OCT, published in *Science* in 1991, has been cited more than 10,000 times. He leads an active NIH-supported research program on the ophthalmic applications of OCT and OCT angiography. He holds patents in the areas of OCT, OCT angiography, laser therapeutic devices, and mobile diagnostic tests. Dr. Huang has received the Champalimaud Vision Award, ARVO Friedenwald Award, AAO Senior Achievement Award, and NAE Russ Award.



LEE M. JAMPOL - USA

Full-time faculty member at Northwestern University. His career focused on clinical trials, inflammatory diseases of the retina, cystoid macular edema, pharmacology of the retina, central serous chorioretinopathy, diabetic retinopathy and age related macular degeneration. He is Chair of the Diabetic Retinopathy Clinical Research Network. He has been president of the American Ophthalmological Society, trustee and vice president of ARVO, president of the Chicago Ophthalmological Society, Chairman of the Department of Ophthalmology at Northwestern University from 1983-2010.

He has been involved in data monitoring for pharmaceutical companies, including the treatment of uveitis, age related macular degeneration and diabetic retinopathy and is presently a consultant to Stem Cell Organization for their studies of age related macular degeneration.



YALI JIA - USA

She is a brilliant young scientist. She co-invented split-spectrum amplitude de-correlation angiography (SSADA), a highly efficient OCTA algorithm that made clinical OCTA practical. Dr. Yali Jia earned her PhD in Biomedical Engineering from the Oregon Health & Science University (OHSU) in 2010 under the guidance of Dr. Ruikang Wang. Dr. Jia completed her post-doctoral training with Dr. David Huang at Casey Eye Institute in 2013. She co-invented split-spectrum amplitude de-correlation angiography (SSADA), a highly efficient OCTA algorithm that made clinical OCTA practical. Dr. Jia continued at OHSU as an Assistant Professor of Ophthalmology and Biomedical Engineering. She was awarded three NIH

research project grants that partially supported the initial works that demonstrated clinical applications of OCTA in retinal diseases. She has published 70 peer-reviewed journal articles, 3 books and 23 book chapters.



ANAT LOEWENSTEIN - ISRAEL

Anat Loewenstein, MD, MHA is a professor and director of the Department of Ophthalmology at the Tel Aviv Medical Center. She earned her medical degree at the Hebrew University in Jerusalem and completed a residency in ophthalmology at the Tel Aviv Medical Center then clinical fellowship in vitreoretinal disease at the Wilmer Eye Institute at Johns Hopkins Hospital. Since the year 2000, Dr. Loewenstein is chair of the department of Ophthalmology, Tel Aviv Medical Center.

Full professor of Ophthalmology in the Sackler Faculty of Medicine at the Tel Aviv University. She is one of the Israeli and International opinion leaders in the field of Vitreoretinal disease and surgery. From the research point of view, she had more than 280 publications in peer reviewed ophthalmology journals, as well as more than 20 chapters in books. Her main focus of research interest is early detection of macular degeneration, drug toxicity of the retina, drug delivery and penetration into the retina, and treatment of retinal vascular disease.

She received multiple international recognitions and awards, as The Macula Society Arnall Patz Medal for outstanding contribution in studies of retinal and macular diseases and Macula Society-Rosenthal Award.



BRUNO LUMBROSO - ITALY

He is a pioneer and teacher in the development of clinical applications for “en face” OCT and OCT Angiography. He was also a pioneer in Fluorescein Angiography, Retinal Laser treatment, ICG Angiography, Retinal Imaging. He has taught Imaging in Ophthalmology. He organized the first Congresses on “en face” OCT and on OCT Angiography in the world. He organizes every year two important meetings on retinal diseases and on OCT and OCTA. He earned his MD degrees in 1958, at the University of Paris, and MD degree in 1959 at University of Rome, La Sapienza) where he also completed his ophthalmology residency with Gian Battista Bietti. He also a post-doctoral fellowship at the University of California (UC) in San Francisco.

He has been Director of the Department of Ophthalmology of the Rome Eye Hospital and Professor LD of Clinical Ophthalmology in the University of Rome La Sapienza for more 35

years. He is now Director, Centro Italiano Macula, Rome, Italy and general secretary of the Italian Laser Society. He has written handbooks and retinal imaging in fluorescein angiography, ICG, microperimetry, spectral domain OCT, “en face” OCT, OCT Angiography. He has been a pioneer and teacher in Fluorescein Angiography, Retinal Laser treatment, ICG Angiography, Retinal Imaging.

He was also a pioneer in the development of clinical applications for “en face” OCT and OCT Angiography. He is co-founder and General Secretary of the Societa Italiana di Angiografia OCT and of the Societa Italiana di Laser in Oftalmologia. He is involved in medical education in ocular imaging. His main interest are in logical methods of retinal imaging analysis and interpretation, and in clinical applications of OCT and OCT Angiography technology for retinal disorders.

He organized the first Congresses on “en face” OCT and on OCT Angiography in the world.

Director, Centro Italiano Macula, Rome, Italy.



LEONARDO MASTROPASQUA - ITALY

Full Professor in Ophthalmology, Head of the Ophthalmology Department Head of the Center of Excellence, National High-tech Center (CNAT) and Italian School of Robotic Surgery in Ophthalmology University “G d’ Annunzio” of Chieti-Pescara, Italy. Certified member of EVICR.net President of the Italian Council of University Professors in Ophthalmology, President of the Italian Society of University Ophthalmologists (SOU).



MARION MUNK - SWITZERLAND

Marion R. Munk is a trained MD, PhD, Assistant Professor and Retina and Uveitis specialist at the Inselspital, University Clinic Bern in Switzerland and project manager and supervisor at the Bern Photographic Reading Center. She is also adjunct Lecturer at the Northwestern University, Chicago, USA, where she previously was a research fellow in Medical retina. Marion R Munk is the author and co-author of numerous scientific articles and book chapters. Her major research interests cover image processing, image analyses, macular diseases and posterior uveitis. In addition to her own scientific production, Marion R Munk is a member of the Editorial Board of the journals BMC Ophthalmology and Acta Ophthalmologica, and in addition she is providing peer-review for a long list of scientific journals within Ophthalmology.



QUAN DONG NGUYEN - USA

Born in Saigon, Vietnam, and immigrated with his parents and three brothers to the United States in 1980, Dr. Quan Dong Nguyen currently is a Professor of Ophthalmology at the Byers Eye Institute, Stanford University School of Medicine.

Dr. Nguyen received his baccalaureate from the Phillips Exeter Academy and his bachelor and master of science degrees simultaneously in Molecular Biophysics and Biochemistry from Yale University. Subsequently, he earned his medical degree at the University of Pennsylvania School of Medicine. He completed an internship in Internal Medicine at the Massachusetts General Hospital and a residency in Ophthalmology at the Massachusetts Eye and Ear Infirmary, Harvard Medical School. Dr. Nguyen also completed fellowships in Immunology and Uveitis at the Massachusetts Eye and Ear Infirmary, Ocular Immunology at the Wilmer Eye Institute of the Johns Hopkins Medical Institutions, and medical and

surgical retina at the Schepens Eye Research Institute and the Massachusetts Eye and Ear Infirmary.

After completing his education in 2001, Dr. Nguyen joined the faculty at the Wilmer Eye Institute, Johns Hopkins University School of Medicine, as Assistant Professor and then Associate Professor of Ophthalmology and Director of Medical Education. In 2013, he was appointed as the McGaw Endowed Chair in Ophthalmology, Professor and Chairman of the Department of Ophthalmology and the Inaugural Director of the Stanley M. Truhlsen Eye Institute, and Assistant Dean for Translational Research at the University of Nebraska Medical Center.

Dr. Nguyen serves as principal investigator on multiple clinical trials sponsored by the National Eye Institute and other organizations for macular edema (from diabetes and uveitis), neovascular age-related macular degeneration (AMD), and ocular inflammatory and uveitic diseases, as well as co-investigator on numerous other clinical trials involving novel therapeutic agents. Dr. Nguyen is known for his innovative work in early proof-of-concept, first-in-human clinical trials to evaluate potential pharmacotherapeutic agents for retinal vascular and uveitic diseases. Dr. Nguyen and his team were among the first clinician scientists in the world to evaluate aflibercept for neovascular AMD and ranibizumab for diabetic macular edema (DME); the initial results of these studies served as the foundation for subsequent trials leading to the approval of these pharmacologic agents by the FDA and other regulatory authorities for the indicated diseases. Dr. Nguyen has chaired the United States multi-center READ-2, READ-3, and iDEAL studies, evaluating the potential role of VEGF antagonists, through different pathways, for diabetic macular edema.

Dr. Nguyen has lead the SAVE, and the multi-centered SAVE-2, and STOP-UVEITIS studies to evaluate the role of new pharmacologic agents, including specific interleukin inhibition, in uveitis and ocular inflammatory diseases. Dr. Nguyen has been elected to many prestigious national and international professional organizations, including the American Academy of Ophthalmology, the Macula Society, the Retina Society, the American Society of Retina Specialists, the American Uveitis Society, the International Ocular Inflammation Society, the Association for Research in Vision and Ophthalmology, the Club Jules Gonin, and the American Ophthalmological Society.

Throughout his career thus far, Dr. Nguyen has been prolific to share his scientific work through numerous manuscripts published in the literature. He serves on the Editorial Board of several journals, including the *Journal of Ophthalmic Infection and Inflammation and Ophthalmic Surgery, Laser, and Imaging – Retina*, among others. Given his scientific achievements and accomplishments, Dr. Nguyen has been chosen as the Inaugural Editor-in-Chief of *American Journal of Ophthalmology Case Reports*, which has been launched in the fall of 2015 as the companion journal to the *American Journal of Ophthalmology*.

Dr. Nguyen has been very active in Vietnamese medical professional organizations since 1992 when he was still a medical student. In 2004, Dr. Nguyen became the first US medical school graduate to lead the Vietnamese American Medical Association (VAMA) as President; Dr. Nguyen was re-elected as President of the VAMA in 2007 and served until 2010. Dr. Nguyen also served as President of the Vietnamese Medical Association of the Free World from 2005 to 2008. Most recently, Dr. Nguyen has been elected as Chairman of the Board of Directors of the VAMA (2016-2019).

Moreover, Dr. Nguyen has also been very involved in helping to enhance and promote activities of the International Ocular Inflammation Society. Most recently, Dr. Nguyen co-chaired the Scientific Program Committee for the 2011 IOIS Congress in Goa and served on the Executive Committee for the 2013 IOIS Congress in Valencia (Spain). Dr. Nguyen also co-chaired the 2015 IOIS Congress in San Francisco, the first time in its history that the IOIS held its meeting in the United States. Dr. Nguyen has been

elected to serve as Secretary General for the Executive Committee of the IOIS for the term 2015-2019. At the Byers Eye Institute at Stanford, Dr. Nguyen has an active uveitis and ocular inflammatory diseases as well as clinical and surgical retina practice while he continues his research in pharmacotherapy and ocular imaging. In addition, he teaches and trains students, residents, and clinical and research retina and uveitis fellows at Stanford.



DANIEL PAULEIKHOFF - GERMANY

Department of Ophthalmology, St. Franziskus Hospital, Münster, Germany
Daniel Pauleikhoff is Chairman at the department of Ophthalmology, St. Franziskus Hospital, Münster in Germany, Professor of Ophthalmology at the Faculty of Medicine, Essen, Germany and Honorary Professor at Moorfields Eye Hospital/UCL London, GB. He passed his residency in Ophthalmology at the University of Essen, Germany, and a two year fellowship at Moorfields Eye Hospital/Institute of Ophthalmology in London with Professor Alan C. Bird. Daniel Pauleikhoff main research activities focus on pathogenesis, phenotyping and therapy of age-related macular degeneration. He is principal investigator for various interventional clinical trials in AMD, diabetic retinopathy and retinal vein occlusions and has received many scientific grants for basic science and clinical investigations. He is President of the German Retina Society since 2012, serving on the board of this society as a vice-president for the previous 4 years. Dr. Pauleikhoff has authored over 170 publications in peer-reviewed journals, and he is editor/coeditor on several books on macular diseases and received several honorary lectures.



MADDALENA QUARANTA-EL MAFTOUHI - FRANCE

Retina specialist and Medical Director of the Centre Ophtalmologique Rabelais in France. She received her medical degree from the University of Brescia, Italy in 1989. She completed her ophthalmology residency at the University of Milan, Italy in 1991. She has been Praticien hospitalier full-time, then Assistante Specialisee des Hopitaux in the Clinique Universitaire de Cre ´teil from 1994 to 1999. Dr Quaranta's clinical and research interests include retina and vitreous diseases and imaging techniques. She has authored several publications in peer-reviewed journals.



GIUSEPPE QUERQUES - ITALY

He is a brilliant young clinician, expert in OCT Angiography and imaging specialist. Associate Professor at University Vita-Salute, IRCCS Ospedale San Raffaele, Milan, Italy. His main topics are Medical Retina and ophthalmic surgery. Doctor Querques has contributed to more than 300 peer-reviewed articles published mainly in the areas of Medical Retina (age-related macular degeneration, retinal vascular diseases, hereditary retinal diseases, ophthalmic genetics). His current main area of both clinical and laboratory research is focusing on the diagnosis (imaging) and treatment of age-related macular degeneration, retinal vascular diseases, and hereditary retinal diseases.



MARCO RISPOLI - ITALY

He is a brilliant young clinician, expert and pioneer in OCT Angiography and imaging specialist. He is in on staff of the Ophthalmology Department Ospedale Nuova Regina Margherita and in Centro Italiano Macula, Rome, Italy. He is interested in developing ocular imaging. He has written handbooks on retinal imaging interpretation of time domain OCT and spectral domain OCT. He is co-founder of the Societa Italiana di Angiografia OCT.



PHILIP J. ROSENFELD - USA

Dr. Philip Rosenfeld a top clinician, scientist and teacher. He has been involved in the development of both spectral domain and swept source OCT angiography, as well as novel OCT algorithms for studying AMD. He pioneered the use of Avastin in neovascular AMD, first by performing a study of systemic, intravenous Avastin and then by using Avastin as an intravitreal injection. He successfully explored the use of OCT-guided, as-needed treatment as an alternative to monthly dosing with Lucentis. He is Professor of Ophthalmology at the Bascom Palmer Eye Institute of the University of Miami Miller School of Medicine. His primary clinical and research interests involve macular diseases with a particular focus on age-related macular degeneration (AMD). He has been the principal investigator and study chairman for numerous AMD clinical trials. Dr. Rosenfeld was lead investigator in the Phase I/II/III

Lucentis™ (Genentech) trials, and he pioneered the use of Avastin in neovascular AMD, first by performing a study of systemic, intravenous Avastin and then by using Avastin as an intravitreal injection. Dr. Rosenfeld successfully explored the use of OCT-guided, as-needed treatment as an alternative to monthly dosing with Lucentis. Moreover, he has been involved in the development of both spectral domain and swept source OCT angiography, as well as novel OCT algorithms for studying AMD. As a result, several new OCT clinical trial anatomic endpoints were developed and are being used in ongoing investigations to explore new therapies for dry AMD. In 2009, Dr. Rosenfeld designed and initiated a novel Phase II study exploring complement inhibition for the treatment of dry AMD. The trial, known as the COMPLETE Study, used the FDA-approved drug known as eculizumab (Soliris, Alexion Pharmaceuticals), which was administered intravenously for the treatment of dry AMD. Dr. Rosenfeld is currently participating in additional studies involving complement inhibitors, a beta-amyloid inhibitor, a visual cycle modulator, and embryonic stem cell therapies for the treatment of dry AMD.

SRINIVAS SADDA - USA

He is a world expert on the development of novel diagnostic techniques and intravitreal pharmacotherapy. His major research interests include automated retinal image analysis, retinal substructure assessment, and advanced retinal imaging technologies. Srinivas R. Sadda, MD, is the President and Chief Scientific Officer of the Doheny Eye Institute, the Stephen J. Ryan – Arnold and Mabel Beckman Endowed Chair, and Professor of Ophthalmology at the University of California – Los Angeles (UCLA) Geffen School of Medicine. He received his MD from Johns Hopkins University, where he also completed ophthalmology residency and neuro-ophthalmology and medical retina fellowships (Wilmer Eye Institute).

Dr Sadda's major research interests include automated retinal image analysis, retinal substructure assessment, and advanced retinal imaging technologies. He has more than 330 peer-reviewed publications and 13 book chapters, and has given over 350 presentations worldwide. He is editor of the 5th edition of the Ryan's Retina textbook. Among Dr. Sadda's awards and honors are a Research to Prevent Blindness Physician-

Scientist Award, a Senior Honor Award from the American Society of Retina Specialists, an Achievement Award and a Secretariat Award from the American Academy of Ophthalmology, John H. Zumberge Research and Innovation Award, and the Macula Society Young Investigator Award. He has been named to the Best Doctors of America list for several consecutive years.



DAVID SARRAF - USA

He is a world leader in the field of advanced retinal imaging and has published extensively in the area of spectral domain OCT analysis of AMD and other novel and established macular disorders. He was one of the first researchers to describe ischemia of the deep retinal capillary plexus using advanced SD OCT imaging and is an international expert on the clinical application of OCT angiography.

Dr. David Sarraf is Clinical Professor of Ophthalmology at the Stein Eye Institute at UCLA and member of the Retinal Disorders and Ophthalmic Genetics Division. He has published over 150 research papers, case reports, reviews and book chapters and is co-author for the second edition of the Retina Atlas.

Dr. Sarraf's focus of research interest is the dry and wet forms of age-related macular degeneration (AMD) and specifically the evaluation of pigment epithelial detachment and retinal pigment epithelial tears. He was nominated to the American Ophthalmological Society because of his research work on the subject of PED and AMD. Dr. Sarraf is a world leader in the field of advanced retinal

imaging and has published extensively in the area of spectral domain OCT analysis of AMD and other novel and established macular disorders. He was one of the first researchers to describe ischemia of the deep retinal capillary plexus using advanced SD OCT imaging and is an international expert on the clinical application of OCT angiography.

Dr. Sarraf is an associate editor for the journal Retinal Cases and Brief Reports and has served on the BCSC section of the AAO that has completed the most recent edition of the Retina volume Dr. Sarraf is also co-director of the Pacific Retina Club and the



International Retinal Imaging Symposium. He is a member of the ASRS, Retina Society and Gass Club and has served as an executive board member in the Macula Society. He also serves as an advisory board member of the DRCR Network and Optovue Inc.



MARIA CRISTINA SAVASTANO - ITALY

She is a brilliant young clinician, expert in OCT Angiography and imaging specialist. She is in on staff of the Centro Italiano Macula, Rome, Italy. She graduated in 2002. Residency and later PhD in vision science at the Catholic University Dept of Ophthalmology in Rome. She has dedicated the last 15 years to retinal diseases, particularly macular degeneration and diabetic retinopathy following the progress of diagnostic and treatment of these diseases, She participated in national and international research on new therapies. She has written more than 20 articles on retinal imaging interpretation of time domain OCT and spectral domain OCT in peer reviewed Journals and is co-founder of the Societa Italiana di Angiografia OCT.



URSULA SCHMIDT-ERFURTH - AUSTRIA

She is a world expert on the development of novel diagnostic techniques, retinal imaging and novel treatment strategies such as intravitreal pharmacotherapy.

Ursula Schmidt-Erfurth is Professor and Chair of the Department of Ophthalmology at the University Eye Hospital, Vienna, Austria. Professor Schmidt-Erfurth's clinical activities include surgical and medical retina. Her scientific research focuses on the development of novel diagnostic techniques, e.g., retinal imaging and novel treatment strategies such as intravitreal pharmacotherapy. She has founded the Vienna Reading Center (VRC), an independent institution for digital imaging performing image analysis for over 140 clinical sites worldwide. She is head of the OPTIMA project, providing computational image analysis (Christian

Doppler Laboratory for Ophthalmic Image Analysis). She serves as past President of EURETINA (European Society of Retina Specialists), the largest community of retinologists worldwide and holds an appointment as Adjunct Professor at Northwestern University, Feinberg School of Medicine, Chicago.



ERIC SOUIED - FRANCE

Eric Souied is an eminent clinician, geneticist and imaging specialist. he leads a dynamic group focused on multimodal imaging of the macula. He earned his MD and PhD degrees in 1990-2006, at the University Paris Est (UPE). He completed his ophthalmology residency with Gabriel Coscas and subsequently his fellowship with Gisele Soubrane, two international leaders in the field of medical macula. He also accomplished a post-doctoral fellowship on gene therapy at the Jules Stein Eye Institute, UCLA, with Deborah Farber and Steve Schwartz.

Professor Eric H Souied has contributed to more than 240 peer-reviewed publications in the areas of age-related macular degeneration (AMD), hereditary retinal diseases, ophthalmic genetics and multimodal imaging.

He began in the field on genetics in 1993 with Pr Arnold Munich, working on genetics of retinitis pigmentosa and Stargardt disease. In 1995, he had a precursor vision on the pathogenesis of AMD and decided to investigate a novel hypothesis: the role of genetics in AMD. In 1998 he published in the AJO the first paper about a genetic polymorphism, on the ApoE gene, and AMD. Then, he leaded many other genetic studies on AMD, and investigated the role of environmental factors in the occurrence of AMD (2002-2012). In 2013, he published the first interventional study about oral DHA in the prevention of exudative AMD, the NAT2 study.

Besides these studies on genetic and environmental factors on AMD, he leads a dynamic group focused on multimodal imaging of the macula. They published many papers describing angiographic, SD-OCT, enface-OCT, adaptive optics and OCT angiography features in many macular conditions such as juvenile drusen, reticular pseudodrusen, choriorretinal anastomosis, adult-onset foveomacular vitelliform dystrophy, geographic atrophy. In addition, he explored emerging therapies and protocols for AMD, DME, RVO, including anti VEGF treatments. He has led or participated to several studies engaged in exploring new therapeutics. Since 2006, he is full professor at Paris Est University and, since 1999, head of department of ophthalmology at both "Hopital Intercommunal de Creteil" and "Henri Mondor" hospital, in France. He managed to surround the best elements in France and promote their career.

He is the founder president of the French "Association DMLA" and the founder president of the French society "Federation France Macula".



RICHARD F. SPAIDE - USA

Richard F. Spaide, MD is a brilliant mind, specialist in retinal diseases, a top basic and scientist, a top clinician and a great teacher. He is a world leader in the field of advanced retinal imaging and has published extensively in the area of OCT analysis of AMD and other novel and established macular disorders. He published papers on indocyanine angiography, fundus autofluorescence, characterization of central serous chorioretinopathy, application of mechanical engineering principles to macular hole formation, development of concepts concerning oxidative damage and characterization of lipid peroxides in Bruch's membrane, combination therapy for age-related macular degeneration, and development of new methodologies to image the retina and choroid. His current research interests include multimodal imaging, optical coherence tomography angiography, and new computer-based rendering techniques to visualize retinal anatomy.

He has published more than 300 articles in peer-reviewed journals, nearly 50 book chapters, and edited several books. He is a graduate of Muhlenberg College and Jefferson Medical College in Philadelphia. He completed his Ophthalmology Residency at St. Vincent's Hospital and Medical Center in New York and his Retina Fellowship at the Manhattan Eye, Ear, and Throat Hospital. He is in private practice at the Vitreous, Retina, Macula Consultants of New York. His major research interests include macular diseases, retinal surgery, and ocular imaging.

Dr. Spaide has been cited in multiple Who's Who and Best Doctors lists and has received many awards including the Richard and Linda Rosenthal Foundation Award in the Visual Sciences, Prix Soubrane de la Recherche en Ophthalmologie, Award of Merit from the Retina Society, Henkind Award, Coscas Award, Nataraja Pillai Award from the Vitreoretinal Society of India, W. Richard Green MD Award, George Theodossiadis Award from the Greek Retinal Society, Founders Award from the American Society of Retinal Surgeons, Life Achievement Honor Award from the American Academy of Ophthalmology, Simon Gratz Award from Thomas Jefferson University, and the Roger Johnson Award in Macular Degeneration Research. He is on the Editorial Board of several journals, an Associate Editor of the journal Retina, and a former Executive Editor of the American Journal of Ophthalmology.

Throughout his professional career, his emphasis has been on teaching and research in the area of medical-retinal diseases. He is invited all over the world to teach on macular diseases, retinal surgery, and ocular imaging.



GIOVANNI STAURENGHI - ITALY

Giovanni Staurenghi is a brilliant specialist in retinal diseases, a top basic and scientist, and a top clinician. He is a world leader in the field of AMD and other macular disorders. He is professor of ophthalmology, chair of the University Eye Clinic and director of the University Eye Clinic Department of Biomedical and Clinical Sciences "Luigi Sacco" at Luigi Sacco Hospital in Milan, Italy and director of Residency Program at the same University. He was awarded his degree at the University of Pavia, Italy, in 1986, and completed his residency at the University of Milan in 1990. He was a research fellow at the Schepens Eye Research Institute in Boston, Massachusetts, USA, from 1991 to 1992 and visiting scientist at the same institute from 1992 to 1993. He became associate professor in 1999 and was promoted to full professor in 2007.

Professor Staurenghi is a scientific advisor of the Digital Angiography Reading Center and visiting professor and consultant for the Belfast Ophthalmic Reading Center at the Central Angiographic Resource Facility. He is silver fellow of ARVO. Professor Staurenghi's research, publications and lectures have an important bearing on retinal degeneration; in particular, his work is focused on different types of imaging and treatment. He was awarded with the Coscas medal, and give name lectures such

as Junius Kuhnt lecture and the Heinrich Müller lecture.



ERIC SWANSON - USA

Eric Swanson is an active participant in a variety of entrepreneurial, industrial, academic, and volunteer activities. He is a member of the board of directors for Acacia Communications, NinePoint Medical, Curata Incorporated, and the Danish National Quantum Innovation Center. He is an affiliate of the MIT Deshpande Center for Entrepreneurship and founder and editor of www.octnews.org. Mr. Swanson is a co-founder or founding board member of five start-up companies: Advanced Ophthalmic Devices (an ophthalmic OCT company acquired by Zeiss Meditec in 1994), Lightlab Imaging (a cardiovascular OCT company acquired by St. Jude Medical in 2009), Sycamore Networks (Nasdaq IPO 1999), Acacia Communication (Nasdaq IPO 2016), and Curata Incorporated (private). These companies have evolved over time and shipped billions of dollars in products around the world. Prior to entering the entrepreneurial world, Mr. Swanson

served in several technical and managerial roles at Massachusetts Institute of Technology Lincoln Laboratory over a 16 year period working on inter-satellite laser communication systems, fiber optic telecommunications, and optical coherence tomography. Mr. Swanson is a Fellow of the OSA and IEEE and has co-authored 77 journal articles, 171 conference presentations, 33 US patents, and 8 book chapters. He is a co-recipient of the 2002 Rank Prize in Opto-Electronics, the 2012 Champlimaud Vision Award, and the 2017 National Academy of Engineering Russ Prize, all for contributions to the field of Optical Coherence Tomography. Mr.

Swanson holds a B.S. in Electrical Engineering from the University of Massachusetts and an M.S. in Electrical Engineering from the Massachusetts Institute of Technology.



NADIA WAHEED – USA

She is a brilliant young clinician, expert and pioneer in OCT Angiography and imaging specialist. She is Director of the Boston Image Reading Center and Associate Professor in Ophthalmology at the Tufts University Medical School. Dr Waheed graduated from Medical School at the Aga Khan University in Pakistan and went on to get her Residency in Ophthalmology and Fellowship in Retina at the Massachusetts Eye and Ear Infirmary/Harvard Medical School Program in Ophthalmology. She also received a Masters in Public Health at the Harvard School of Public Health. She then worked at the Cleveland Clinic Cole Eye Institute before joining Tufts. She has published extensively on ocular imaging and on ocular imaging in clinical trials and is the editor of two books on imaging of the retina.



LAWRENCE A. YANNUZZI - USA

One of the most admired ophthalmic clinician in the world, he is a pioneer and teacher in the development of clinical applications of Fluorescein Angiography and Retinal Laser treatment. He was the first to understand the utility of ICG Angiography, Retinal Imaging. He has taught in the USA and all over the world Imaging in Ophthalmology. He has described numerous new syndromes. His textbook, Retinal Atlas, is an outstanding medical publication, used and admired all over the world. He published recently, with his collaborators a brilliant new edition. Throughout his professional career, his emphasis has been on teaching and research in the area of medical-retinal diseases.

Dr. Lawrence A. Yannuzzi aspired to be a musician at Arts High School for Music and Art. Limited in musical talent, he attended Harvard College to study mathematics. Following a brief experience in computer programming at IBM, he attended Boston University Medical School, where he eventually was given the Award of Distinguished Alumnus in 1989. Later he was honored as a distinguished alumnus of Boston University in 2006. His ophthalmology residency was at the Manhattan Eye, Ear & Throat Hospital. As

director of its residency program, he also followed J. Donald Gass as a guiding mentor and inspiration to initiate and head the medical-retinal service, introducing fluorescein angiography to the Greater New York Community. He also received a grant to start a laser photocoagulation service, utilizing the first commercial Coherent argon laser in the Greater New York Area. Along with Dr. Ronald Carr and Dr. Paul Henkind, he organized and led the New York Retinal Club which eventually evolved into the Atlantic Coast Retinal Club when combined with Dr. Jerry Shields in Philadelphia and Dr. Stuart Fine in Baltimore.

Throughout his professional career, his emphasis has been on teaching and research in the area of medical-retinal diseases. A classification for the interpretation of abnormal fundus fluorescence was reported and used by a generation of retinal specialists. This method of reading fluorescein angiograms was the basis of a textbook, Interpretation of Fundus Fluorescein Angiography with co-authors headed by Dr. Howard Schatz. He was also instrumental in the development of ophthalmic lasers which included the Krypton-Red laser and the multi-colored tunable dye laser.

Among his other clinical contributions was the development of digital indocyanine-green (ICG) angiography by incorporating a Kodak camera, heavily weighted in the near-infrared, a distinct filter combination to enhance the fluorescence of the dye in the choroid, and high-resolution digital images. A textbook on the Interpretation of Indocyanine-Green Angiography followed. Standard references on the potential adverse reactions to intravenous fluorescein and indocyanine-green angiography were also reported by him. Over the years, he described several new diseases of the fundus and newly-recognized manifestations of known diseases, based principally on their clinical and angiographic findings. These included cystoid macular edema and the use for the first time in the field of ophthalmology a topical, commercially available non-steroid anti-inflammatory topical agent (Indomethacin), and an array of findings in central serous chorioretinopathy (CSC) including its relationship to corticosteroids and sympathomimetic amines in his AOS thesis on Type A Behavior as risk factors for the disease. In this peculiar maculopathy, he also separately described in depth the advent and nature of descending atrophic pigment epithelial tracts from chronic detachment of a macula and gravitating, inferior peripheral detachments, the use of indocyanine-green angiography in CSC as a guide for treating hyperpermeable areas in the choroid with photodynamic therapy to resolve neurosensory retinal detachments. One of the new diseases described in the macula was Acute Idiopathic Maculopathy; another was peculiar posterior choroidal inflammatory/occlusive disease that looked like Serpigenous Choroidopathy and Acute Placoid Pigment Epitheliopathy based on manifestations of both of those disorders, which he named described "Ampigenous" but later termed Relentless Chorioretinitis. In another disease he originally called "Macular Serpiginous," he joined other authors to describe this entity as Persistent Placoid Pigment Epitheliopathy. Perhaps the most relevant of his contributions are applications of indocyanine-green angiography, including the identification of variants in choroidal neovascularization, particularly at risk in individuals who are pigmented....specifically Polypoidal Choroidal Vasculopathy or PCV. Another variant of neovascular Age-Related Macular Degeneration (AMD), which involves principally the retinal vascular layers, known as Retinal Angiomatous Proliferation or "RAP,"

(now called Type III neovascularization) was discovered by him. He also has contributed to our understanding of Macular Telangiectasia Type II, Multifocal Choroiditis with Zonal Atrophy, Multiple Evanescent White Spot Syndrome, (MEWDS), Focal Retinal Phlebitis and Branch Retinal Vein Occlusion, Acute Zonal Occult Outer Retinopathy, and more recently, Idiopathic Acute Polymorphous Vitelliform Chorioretinopathy. Through his development and leadership, he founded The Macula Foundation, Inc., and the LuEsther T. Mertz Retinal Research Center of the Manhattan Eye, Ear & Throat Hospital which has been instrumental in the support of teaching programs, basic clinical scientific research, teaching, meetings, and numerous innovative, original and lasting publications for nearly 30 years. In the past three years, the foundation has supported 70 - 90 annual publications, predominantly in peer-review journals.

In the course of his career, he has been acknowledged for his accomplishments, receiving virtually all of the major awards in the area of medical-retinal disease from regional, national and international institutions and societies. These include an Honorary Doctorate by the University of Ancona, the Michelson Award for Retinal Vascular Disease, the Henkind, Gass, and Patz Medals by The Macula Society, the Alcon Research Award, the Herman Wacker Award of the Club Jules Gonin, the Retinal Research Award and the Gass Medal from the Retina Society, the Arthur J. Bedelle Award, the Kreissig Award from EuroRetina, the Bietti Medal, the Pisart Award from the Lighthouse International, and a Lifetime Achievement Award by the American Academy of Ophthalmology. He has also personally published more than 500 clinical-scientific papers and edited and/or authored 14 books. One of his most recent books, The Retinal Atlas, was the recipient of the Prose Award as an outstanding medical academic publication. It has been translated into eight languages worldwide, and it has now become a standard for teaching and reference in retinal disease. His motto as a teacher and clinical scientist, was once characterized by a noted former fellow as, "Always conduct yourself professionally in the best interest of your patients"....and another..... "What is best for residents and fellows is best for the academic program and its affiliated institutions."...and another..... "Family first." With regard to his perspectives on his most important achievements, he by far considers a marriage which is now over fifty years in duration, three wonderful and successful children: a pediatric psychiatrist, a banker, and a resident in ophthalmology, as well as parents of seven wonderful and loving grandchildren. Above all, they are good friends who find time to spend with each other and their parents.