



Meeting At A Glance

August 9 — 14

American Society of Retina Specialists

34th Annual Meeting
San Francisco, California

EVENT LOCATIONS

Instructional Courses	Tuesday, August 9: Yerba Buena 12-15 and Nob Hill A-D <i>Lower B2 Level</i> Thursday, August 11: Yerba Buena 7-9 and Nob Hill A/B <i>Lower B2 Level</i> Friday, August 12: Yerba Buena 7-9 and Nob Hill A/B <i>Lower B2 Level</i> Saturday, August 13: Yerba Buena 12-15 and Nob Hill C/D <i>Lower B2 Level</i>
Welcome Reception <i>Tuesday, Aug. 9, 7-10 PM</i>	Museum of Modern Art, 151 3rd St
Young Physicians Section Lunch <i>Wednesday, Aug. 10, 11:40 AM-12:55 PM</i>	Yerba Buena 10-15 <i>Lower B2 Level</i>
Retina Case Conference <i>Wednesday, Aug. 10, 4:00-6:00 PM</i>	Yerba Buena 7-9 <i>Lower B2 Level</i>
Women in Retina (WinR) Case Conference <i>Wednesday, Aug. 10, 6:30-9:00 PM</i>	Nob Hill C-D <i>Lower B2 Level</i>
Women in Retina (WinR) Lunch <i>Thursday, Aug. 11, 11:45 AM-1:00 PM</i>	Yerba Buena 10-15 <i>Lower B2 Level</i>
ASRS International Members Reception <i>Thursday, Aug. 11, 6:30-7:30 PM</i>	Yerba Buena Ballroom Foyer <i>Lower B2 Level</i>
Gala Dinner <i>Saturday, Aug. 13, 6:30-9:00 PM</i>	Palace Hotel, 2 New Montgomery St
Umbo Lounge <i>Saturday, Aug. 13, 9:00-11:30 PM</i>	San Francisco Marriott Marquis, Yerba Buena 7-9 <i>Lower B2 Level</i>

ONGOING WEDNESDAY, AUG. 10 - SUNDAY, AUG. 14

Speaker-Ready Room	Juniper Room <i>B2 Level</i>
Continental Breakfasts & Breaks	Golden Gate Ballroom <i>B2 Level</i>
General Sessions	Yerba Buena 7-9 <i>Lower B2 Level</i>
Lunches	Golden Gate Ballroom <i>B2 Level</i>
Electronic Poster Kiosks	Yerba Buena Ballroom Foyer <i>Lower B2 Level</i>
PAT Survey Posters	TBD
Exhibits	Golden Gate Ballroom <i>B2 Level</i>
Paper on Demand (POD) Kiosks	Yerba Buena Ballroom Foyer <i>Lower B2 Level</i>
3D Video Kiosks	Yerba Buena Ballroom Foyer <i>Lower B2 Level</i>
Film Festival Kiosks	Yerba Buena Ballroom Foyer <i>Lower B2 Level</i>

TUESDAY, AUGUST 9

1:00-5:15 PM	Instructional Courses
1:00-2:15 PM <i>Yerba Buena 12/13</i>	Uveitis Controversies by the Bay, Steven Yeh, MD Faculty: Thomas A. Albini, MD; Howard F. Fine, MD, MHSc; Rahul N. Khurana, MD; Purnima S. Patel, MD; Sunil Srivastava, MD; Robert C. Wang, MD
1:00-3:00 PM <i>Nob Hill C/D</i>	The Scleral Buckle: New Light on the Lost Workhorse of Retinal Detachment Surgery, Kamal Kishore, MD, MBBS; Raja Narayanan, MD, MBA ; Christina Y. Weng, MD, MBA Faculty: Royce W.S. Chen, MD; Ninel Z. Gregori, MD; Tamer H. Mahmoud, MD, PhD; Prithvi Mruthyunjaya, MD; Manish Nagpal, MD, FRCS(UK); D. Wilkin Parke, III, MD; Michael W. Stewart, MD
1:00-3:00 PM <i>Nob Hill A/B</i>	Combined Phacovitrectomy in the Era of MIVS and COMICS, Shobhit Chawla, MS and Edmund Y.M. Wong, MBBS, MMed, FRCS Faculty: Alay S. Banker, MD; Shu-Yen Lee, MBBS, FRCSed(Ophth); Yusuke Oshima, MD, PhD; Gavin S. Tan, MBBS, MMed, FRCSed(Ophth)
1:00-2:15 PM <i>Yerba Buena 14/15</i>	Advanced Macular Surgery—“Tell It Like It Is...”, Malhar Soni, DO, MS, DNB, FRCS Faculty: Steve T. Charles, MD; Carl Claes, MD; Kazuaki Kadosono, MD; Jerzy Nawrocki, MD, PhD
2:30-3:45 PM <i>Yerba Buena 14/15</i>	Newer Advances in Vitreo-Retinal Surgeries: Tools and Techniques, S. Natarajan, MD Faculty: Alay S. Banker, MD; Ehab N. El-Rayes, MD, PhD; Tamer H. Mahmoud, MD, PhD; Rishi P. Singh, MD
3:15-5:15 PM <i>Nob Hill C/D</i>	Secondary IOL Implantation and Fixation for Retina Specialists—Review of Techniques, Pros and Cons, Tips and Tricks, Gennady Landa, MD, and Matthew P. Ohr, MD
3:15-4:30 PM <i>Nob Hill A/B</i>	Pneumatic Retinopexy: All you Need to Know and Beyond, Wai-Ching Lam, MD, FRCS(C) Faculty: Varun Chaudhary, MD; Peter J. Kertes, MD, FRCS(C); Emmanouil Mavrikakis, MD, PhD; Rajeev H. Muni, MD, MSC, FRCS(C)
3:15-5:15 PM <i>Yerba Buena 12/13</i>	Uveitis for the Retina Specialist: What Do I Do Now?, Sam Dahr, MD and Sumit Sharma, MD Faculty: Francisco A. Folgar, MD and Sunil Srivastava, MD
4:00-5:15 PM <i>Yerba Buena 14/15</i>	Challenge the Masters Course, Gabriela Lopezcarasa Hernandez, MD; Calvin E. Mein, MD; Virgilio Morales-Canton, MD; Hugo Quiroz-Mercado, MD
7-10 PM <i>151 3rd St</i>	Welcome Reception Museum of Modern Art

WEDNESDAY, AUGUST 10

7:15-8:15 AM Continental Breakfast

7:45-7:50 AM Welcome, Mark S. Humayun, MD, PhD

7:50-9:05 AM Awards Ceremony

Moderators: **Tarek S. Hassan, MD, and Mark S. Humayun, MD, PhD**

- 7:50 Pyron Award Introduction, **Tarek S. Hassan, MD**
- 7:55 Pyron Award, **Donald J. D'Amico, MD**, Permanent Keratoprosthesis and Complex Ocular Reconstruction: New Opportunities and Challenges for the Vitreoretinal Surgeon
- 8:15 Discussion
- 8:20 Founders Award Introduction, **Mark S. Humayun, MD, PhD**
- 8:25 Founders Award, **Carol L. Shields, MD**, Innovations in Retina Tumors 2016
- 8:45 Discussion
- 8:50 Young Physicians Section (YPS), Crystal Apple Award Presentation to **Lee Jampol, MD** by **Vincent Hau, MD, PhD** and **Netan Choudhry, MD, FRCS(C)**
- 8:55 ASRS Presidents' Retina Young Investigators Award Introduction, **John T. Thompson, MD**
- 8:57 ASRS Presidents' Retina Young Investigators Award, **Jayakrishna Ambati, MD**, Solving AMD: Moving Forward by Stepping Back

9:05-9:25 AM Practice Management Symposium

Moderators: **Reginald J. Sanders, MD and Trexler M. Topping, MD**

- 9:05 Survey of Patient Utilization of Web-Based Health Data Management Technology in an Outpatient Ophthalmology Practice Setting, **Robert Wong, MD**
- 9:13 Retina PractiCare: Coding Benchmarks for Retina Specialists, **John Thompson, MD**
- 9:21 Discussion

9:25-10:05 AM Break

10:05-11:05 AM AMD Neovascular 1 Symposium

Moderators: **David F. Williams, MD, MBA and David M. Brown, MD**

- 10:05 Response to Ranibizumab of Eyes With Pigment Epithelial Detachments, Including Eyes That Developed RPE Tears: Data From the HARBOR Study, **David Eichenbaum, MD**
- 10:13 Gene Expression Modifications in Anti-VEGF Treated Retinal Müller Cells, **Baruch Kuppermann, MD, PhD**
- 10:21 "Real World" U.S. Outcomes of Anti-VEGF Therapy in Neovascular AMD: Risk of Vision Loss is Greatest in Patients with Better Baseline Visual Acuity, **Thomas Ciulla, MD, MBA**
- 10:29 Discussion
- 10:35 Long Term Results of Pro Re Nata Regimen of Aflibercept Treatment in Recurrent or Persistent Neovascular Age-Related Macular Degeneration, **Ilkay Kilic Muftuoglu, MD**
- 10:43 Interim Results and Key Learnings from an Ongoing Phase 2 Study of Encapsulated Cell Therapy Compared to Aflibercept in Patients With Wet AMD, **Szilard Kiss, MD**

- 10:51 Treatment Response to Antioxidant Supplementation Based on *CFH* and *ARMS2* Genetic Risk Allele Number in AREDS Patients With No AMD at Baseline, **Carl Awh, MD**
- 10:59 Discussion

11:05-11:40 AM AMD Neovascular Expert Panel

Moderator: **Robert L. Avery, MD**

- 11:05 Macular Atrophy in Neovascular Age-Related Macular Degeneration Eyes Treated with Monthly or Treat-and-Extend Ranibizumab: TREX-AMD Report No. 2, **Nizar Abdelfattah, MD**
- 11:08 Genetic Variants Associated With Anti-VEGF Drug Response in Neovascular AMD Patients in the VIEW Trial, **Nancy Holekamp, MD**
- 11:11 Baseline Lesion Features are Predictive of Visual Response in Patients With Neovascular AMD Treated With Topical Squalamine and Ranibizumab, **Peter Kaiser, MD**
- 11:14 A Novel Anti-VEGF/Anti-Angiopoietin2 Bispecific Monoclonal Antibody for Wet Age-Related Macular Degeneration and Diabetic Macular Edema, **Pravin Dugel, MD**
- 11:17 Discussion

11:40 AM-12:55 PM General Lunch and YPS Lunch

12:55-1:35 PM Macular Surgery Symposium

Moderators: **Francesco Boscia, MD and Carl Claes, MD**

- 12:55 ORBIT: A Phase IV Clinical Study—Lessons Learned From Patient Selection Criteria for Ocriplasmin Intravitreal Injection, **Mathew MacCumber, MD, PhD**
- 1:03 Differences in Surgical Performance in Peeling the ILM for Macular Holes Between Fellows-in-Training and Experienced Vitreoretinal Surgeons, **Robert Gizicki, MD**
- 1:11 Discussion
- 1:15 T-Shaped Macular Buckling Combined With 25-Gauge Pars Plana Vitrectomy for Macular Hole, Macular Schisis and Macular Detachment in Highly Myopic Eyes, **Marco Mura, MD**
- 1:23 The Evolution of Pre-Existing Epiretinal Membranes Following Cataract Extraction, **Gayatri Reilly, MD**
- 1:31 Discussion

1:35-1:55 PM Macular Surgery Symposium—Rapid Fire Papers

Moderators: **Christine Gonzales, MD and Gaurav K. Shah, MD**

- 1:35 The OASIS Trial: Natural History of Symptomatic Vitreomacular Adhesion, **Joseph Coney, MD**
- 1:40 The OASIS Trial: Efficacy and Safety Outcomes in Subjects With Full-Thickness Macular Hole, **Michael Tolentino, MD**
- 1:45 Correlation of Intraoperative Optical Coherence Tomographic Images With Postoperative Foveal Microstructure in Eyes With Idiopathic Macular Hole, **Makoto Inoue, MD**
- 1:50 Discussion

1:55-2:30 PM Macular Surgery Expert Panel

Moderator: **Carl C. Awh, MD**

1:55	Anatomic and Functional Outcome After Surgery for Myopic Macular Hole: Internal Limiting Membrane (ILM) Flap Technique Versus Complete ILM Removal, Grazia Pertile, MD
1:58	Mechanism of “Flap Closure” After the Inverted Internal Limiting Membrane Flap Technique, Zofia Michalewska, MD, PhD
2:01	Autologous and Allogeneic Lens Capsular Flap Transplantation in the Management of Refractory Macular Hole, Peiquan Zhao, MD
2:04	Autologous Retinal Transplant With and Without Choroidal Transplant in Chronic Refractory Macular Holes, Tamer Mahmoud, MD, PhD
2:07	Discussion

2:30-3:10 PM Break

3:10-3:40 PM	Pediatric Symposium Moderators: Antonio Capone, Jr, MD and Darius M. Moshfeghi, MD
3:10	Retinal Detachment in a Pediatric Population: A Retrospective Review of Etiology and Outcome at the Bascom Palmer Eye Institute, Audina Berrocal, MD
3:18	Computer-Based Image Analysis in Retinopathy of Prematurity: Are We There Yet?, J. Campbell, MD, MPH
3:26	Fluorescein Angiographic Evaluation of Peripheral Retinal Vasculature After Ranubizumab Injection for Type I Retinopathy of Prematurity, Clio Harper, MD
3:34	Discussion

3:40-4:00 PM	Pediatric Symposium—Rapid Fire Papers Moderators: Audina M. Berrocal, MD and Kimberly A. Drenser, MD
3:40	HIPPA and Malpractice Pitfalls in Providing Care to Infants at Risk for Retinopathy of Prematurity (ROP) for Physicians Employing Digital Imaging Technologies, Antonio Capone, MD
3:45	Longitudinal Changes of Peripapillary Pigmentation and Optic Nerve Area in the SUNDROP Preterm Infants: The Influence of Treatment Warranted ROP, Darius Moshfeghi, MD
3:50	Bilateral Simultaneous Vitrectomy in Stage 4-5 ROP, Sengul Ozdek, MD
3:55	Discussion

4:00-5:00 PM	Medical Case Conference Moderators: Neil M. Bressler, MD, and William F. Mieler, MD Presenters: John Allen, MD Netan Choudhry, MD, FRCS(C) Ananda Kalevar, MD, FRCS(C) Rahul Khurana, MD Min Kim, MD Colin McCannel, MD Tara McCannel, MD, PhD Prithvi Mruthyunjaya, MD Quan Nguyen, MD, MSc Sandeep Randhawa, MD Soraya Rofagha, MD, MPH Christina Weng, MD, MBA Fatoumata Yanoga, MD
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5:00-6:00 PM	Surgical Case Conference Moderators: Carl C. Awh, MD and Kourous A. Rezaei, MD Panelists: Maria H. Berrocal, MD David R. Chow, MD, FRCS(C) Jay S. Duker, MD J. Michael Jumper, MD Judy E. Kim, MD Stanislao Rizzo, MD Fumio Shiraga, MD Presenters: Apoorva Ayachit, MS Boris Bajaire, MD Jonathan Chang, MD Vaidehi Dedania, MD Dilraj Grewal, MD Amir Reza Hajrasouliha, MD Kamal Kishore, MD, MBBS Emmanouil Mavrikakis, MD, PhD Manish Nagpal, MD, FRCS (UK) Aleksandra Rachitskaya, MD Jay Stewart, MD Homayoun Tabandeh, MD
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6:30-9:00 PM	Women in Retina (WinR) Case Conference <i>Nob Hill C-D</i> <i>Lower B2 Level</i>
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THURSDAY, AUGUST 11

7:30-8:30 AM Continental Breakfast

8:00-8:50 AM Imaging, Digital, and Angiography Symposium

Moderators: Jay S. Duker, MD and Amir H. Kashani, MD, PhD

- 8:00 The “Double-Layer Sign” on Spectral-Domain Optical Coherence Tomography, **Giridhar Anantharaman, MS**
- 8:08 Evaluation of Choroidal Neovascularization Response to Anti-Vascular Endothelial Growth Factor Treatment With Quantitative OCT Angiography, **Steven Bailey, MD**
- 8:16 Discussion
- 8:20 Qualitative and Quantitative Spectral Domain OCT Angiography (SD-OCTA) of Diabetic Retinopathy, **Amir Kashani, MD, PhD**
- 8:28 Quantitative Microscopic Validation of OCT Angiography Using Adaptive Optics Scanning Light Ophthalmoscope Fluorescein Angiography (AOSLO-FA), **Richard Rosen, MD, DSc(Hon)**
- 8:36 Analysis of Vascular Dilation and Tortuosity Using the ROPtool, **Kimberly Drenser, MD**
- 8:44 Discussion

8:50-9:25 AM Imaging Expert Panel

Moderator: **John S. Pollack, MD**

- 8:50 Ultra-Widefield Steering-Based SD-OCT Imaging of the Retinal Periphery, **Netan Choudhry, MD, FRCS(C)**
- 8:53 Lessons for the High Volume Clinic From an Initial Experience of Optical Coherence Tomography Angiography (OCTA), **Catherine Egan, FRANZCO**
- 8:56 Will Optical Coherence Tomography Angiography Shine When Traditional Ophthalmic Imaging Failed?, **Ching Chen, MD**
- 8:59 Computerized Automated Characterization of Ultra-Widefield Fluorescein Angiography Features, **Justis Ehlers, MD**
- 9:02 Discussion

9:25-10:05 AM Break

10:05-10:55 AM Retinal Vascular Symposium

- Moderators: **Suber S. Huang, MD, MBA** and **Anat Loewenstein, MD**
- 10:05 Individualized Ranibizumab Treatment in Patients With RVO Leads to Visual Acuity Outcomes Consistent With a Monthly Dosing Regimen, **W. Clark, MD**
- 10:13 Baseline OCT Predictors in Macular Edema Due to BRVO: MARVEL Report No.3, **Raja Narayanan, MD**
- 10:21 Selective Retina Therapy for Chronic Central Serous Chorioretinopathy, **Young Jung Roh, MD**
- 10:29 Discussion
- 10:34 Intravitreal Aflibercept for Previously Treated Macular Edema Associated With Central Retinal Vein Occlusions: 1 Year Results From the NEWTON Study, **Rahul Khurana, MD**
- 10:42 Evaluation of Macular Vascular Abnormalities Identified With Optical Coherence Tomography Angiography in Patients With Various Sickle Cell Genotypes, **Adrienne Scott, MD**

10:50 Discussion

10:55-11:15 AM Retinal Vascular Symposium—Rapid Fire Papers

Moderators: **Paul Hahn, MD, PhD** and **Linda A. Lam, MD**

- 10:55 Top 10 Pearls From the SHORE Study: Ranibizumab Treatment for Central and Branch Retinal Vein Occlusion, **Robert Johnson, MD**
- 11:00 Impact of Retinal Ischemia on Visual Acuity Outcomes Following Ranibizumab Treatment Over 24 Months in Patients With Retinal Vein Occlusion, **Michael Fielden, MD, FRCS(C)**
- 11:05 The Effect of Intravitreal Aflibercept on Perfusion Status in Patients With Retinal Vascular Disease: The ANDROID Study, **Jeffrey Heier, MD**
- 11:10 Discussion

11:15-11:45 AM Diabetic Retinopathy 1 Symposium

Moderators: **Mathew W. MacCumber, MD** and **Judy E. Kim, MD**

- 11:15 Deep Capillary Macular Flow Index and Degree of Vessel Density Obtained With OCT Angiography Strongly Correlate With Severity of Diabetic Retinopathy, **K. Chalam, MD, PhD, MBA, FRCS(C)**
- 11:23 Baseline Characteristics Associated With Changes in Diabetic Retinopathy Severity Scale (DRSS) Score: Analyses From the VISTA and VIVID Studies, **Dilsher Dhoot, MD**
- 11:31 Effect of Vitreomacular Adhesion on Treatment Outcomes in the Ranibizumab for Edema of the Macula in Diabetes (READ-3) Study, **Diana Do, MD**
- 11:39 Discussion

11:45 AM-1:00 PM General Lunch and WinR Lunch

1:00-2:45 PM Diabetic Retinopathy 2 Symposium

Moderators: **Rajendra S. Apte, MD, PhD** and **Peter K. Kaiser, MD**

- 1:00 Prospective Trial Comparing Ranibizumab Monthly to Treat and Extend With and Without Angiography-Guided Laser for DME: TREX-DME 1 Year Outcomes, **John Payne, MD**
- 1:08 Vision Gains With Ranibizumab in Eyes With Diabetic Macular Edema and Retinal Nonperfusion at the Macula, **Rahul Reddy, MD, MHS**
- 1:16 Ranibizumab Induces Regression of Diabetic Retinopathy (DR), Prevents Retinal Nonperfusion in Patients at High Risk of Conversion to Proliferative DR, **Charles Wykoff, MD, PhD**
- 1:24 Discussion
- 1:30 Optical Coherence Tomography Angiography of Diabetic Macular Edema and its Association With Anti-VEGF Treatment Response, **Young Hee Yoon, MD**
- 1:38 Cost-Effectiveness of Aflibercept, Bevacizumab, or Ranibizumab for Diabetic Macular Edema: Analysis from a DRCR.net Comparative Effectiveness Trial, **Neil Bressler, MD**
- 1:46 An Exploratory Analysis of Persistent Macular Thickening Following Intravitreal Ranibizumab for Center-Involved DME With Vision Impairment, **Susan Bressler, MD**
- 1:54 Discussion

2:00	Multiplex Vitreous Cytokine Analysis From Office-Based Vitreous Aspiration, Devon Ghodasra, MD
2:08	AKB-9778 in the Treatment of Diabetic Macular Edema: Results From the TIME-2 Study, Arshad Khanani, MD
2:16	Discussion
2:22	The Top 10 Insights From the RIDE/RISE Trials of Ranibizumab in Patients With Diabetic Macular Edema, Rishi Singh, MD
2:30	Real World Data Regarding Initial Visual Acuity In Diabetic Macular Edema (DME), Nathan Steinle, MD
2:38	Discussion

2:45-3:10 PM	Diabetic Retinopathy Expert Panel Moderator: Tarek S. Hassan, MD
2:45	Panretinal Photocoagulation Versus Ranibizumab for Proliferative Diabetic Retinopathy: Patient-Centered Outcomes in a Randomized Clinical Trial, Calvin Mein, MD
2:50	Randomized Trial of PRP vs. Intravitreal Ranibizumab Plus Deferred PRP for Proliferative Diabetic Retinopathy: Treatment Algorithm and Outcomes, Andrew Antoszyk, MD
2:55	Cost Utility Comparison Between Panretinal Photocoagulation vs Intravitreal Ranibizumab for Proliferative Diabetic Retinopathy, Jonathan Chang, MD
3:00	Discussion

3:10-3:50 PM	Break
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3:50-5:05 PM	Instructional Courses
<i>Nob Hill A/B</i>	OCT Angiography in Clinical Practice, Sophie J. Bakri, MD Faculty: Jay S. Duker, MD; Peter K. Kaiser, MD; Amir H. Kashani, MD, PhD; Richard B. Rosen, MD, DSc(Hon); David Sarraf, MD; Srinivas R. Sadda, MD; Sunil Srivastava, MD
<i>Yerba Buena 7-9</i>	ASRS Research and Therapeutics (ReST) Committee Symposium: Clinical Trials “Unplugged”: Real, Practical Questions and Answers, Jeffrey S. Heier, MD Faculty: Pravin U. Dugel, MD; David S. Boyer, MD; David M. Brown, MD; Diana V. Do, MD; Tarek S. Hassan, MD; J. Michael Jumper, MD; Peter K. Kaiser, MD; Judy E. Kim, MD; Baruch D. Kuppermann, MD, PhD; Jennifer I. Lim, MD; Quan Dong Nguyen, MD, MSc; John S. Pollack, MD; Philip J. Rosenfeld, MD, PhD; John T. Thompson, MD

6:30-7:30 PM	ASRS International Members Reception
<i>Yerba Buena Ballroom Foyer Lower B2 Level</i>	

FRIDAY, AUGUST 12

7:30-8:30 AM	Continental Breakfast
8:00-9:20 AM	AMD Neovascular 2 Symposium Moderators: Jeffery S. Heier, MD and John T. Thompson, MD
8:00	Autologous RPE Transplantation in Cases of Long-Standing, Refractory Wet AMD, Nikoloz Labauri, MD, FVRS
8:08	Prospective, Randomized, Subject-Masked Evaluation of Intravitreal Sirolimus vs Anti-VEGF in Chronic Neovascular AMD With Persistent Retinal Fluid, Raj Maturi, MD
8:16	Discussion
8:20	Comparison of Treatment Outcomes Among Subtypes of Polypoidal Choroidal Vasculopathy in a Multicenter Randomized Controlled Study (EVEREST Study), Colin Tan, MBBS, MMed (Ophth), FRCSEd (Ophth)
8:28	High-Dose Ranibizumab Treatment in Polypoidal Choroidal Vasculopathy: PEARL 2 Trial (Polypoidal Choroidal Vasculopathy With Intravitreal Ranibizumab), Raymond Wee, MD
8:36	Outcomes and Practice Preferences After Anti-VEGF Injection Endophthalmitis, Yicheng Chen, MD
8:44	Discussion
8:50	Effects of Aflibercept in Patients With Polypoidal Choroidal Vasculopathy: One-Year Results of the VAULT Study, Joo Eun Lee, MD
8:58	Previous Intravitreal Therapy is Associated With Increased Risk of Posterior Capsule Rupture During Cataract Surgery, Aaron Lee, MD, MSCI
9:06	Topical Dorzolamide-Timolol With Intravitreal Anti-Vascular Endothelial Growth Factor for Neovascular Age-Related Macular Degeneration: A Pilot Study, Jason Hsu, MD
9:14	Discussion
9:20-9:50 AM	Ocular Oncology Symposium Moderators: Prithvi Mruthyunjaya, MD and Rishi Singh, MD
9:20	Next Generation Sequencing of Uveal Melanoma, Armin Afshar, MD, MBA
9:28	Randomized, Prospective Study of Aflibercept for Visually Significant Radiation Maculopathy—Interim Analysis, Timothy Murray, MD, MBA
9:36	Ocular Oncology Study Consortium (OOSC) Report No 2: Effect of Clinical and Pathologic Variables on Biopsy Complication Rates, Amy Scheffler, MD
9:44	Discussion
9:50-10:30 AM	Break
10:30-11:05 AM	Ocular Oncology Symposium—Rapid Fire Papers Moderators: Prithvi Mruthyunjaya, MD and Rishi Singh, MD
10:30	Correlation Between Largest Basal Diameter, Gene Expression Profile, and Survival of Patients With Posterior Uveal Melanoma Evaluated by FNAB, Zelia Correa, MD, PhD
10:35	Outcomes of Chorioretinal Biopsy Using 27-Gauge Microincision Vitrectomy, Prithvi Mruthyunjaya, MD

10:40	Retinal Astrocytic Hamartoma Arises Within Nerve Fiber Layer and Demonstrates Optically Empty Spaces on Spectral Domain Optical Coherence Tomography, Emil Anthony Say, MD
10:45	Discussion
10:50	Prognostic Choroidal Melanoma Biopsy After Proton Beam Radiotherapy, Bertil Damato, MD, PhD, FRCOphth.
10:55	Visual Benefit of Iodine-125 Brachytherapy With Vitrectomy and Silicone Oil for Large Choroidal Melanoma: 1-to-1 Matched Case-Control Series, Tara McCannel, MD, PhD
11:00	Discussion

11:05-11:25 AM AMD Non-Neovascular Symposium
Moderators: **Julia A. Haller, MD** and **Lawrence Halperin, MD**

11:05	Remote Home Monitoring of Early-to-Intermediate Age-Related Macular Degeneration, Vincent Hau, MD, PhD
11:13	Detection of Asymptomatic Neovascularization in Intermediate Age-Related Macular Degeneration Using Swept Source Optical Coherence Tomography Angiography, Philip Rosenfeld, MD, PhD
11:21	Discussion

11:25-11:50 AM AMD Non-Neovascular Expert Panel
Moderator: **Timothy G. Murray, MD, MBA**

11:25	Nucleoside Analogs and Derivatives as Therapies for AMD, Jayakrishna Ambati, MD
11:28	Argus I® Electronic Epiretinal Prosthesis in Advanced Dry AMD With Geographic Atrophy: Safety and Feasibility Study and Preliminary Functional Results, Paulo Stanga, MD
11:31	Severe Vision Loss After Intravitreal Injections of Autologous Adipose Tissue-derived Stem Cells for Age-Related Macular Degeneration, Ajay Kuriyan, MD, MSc
11:34	Discussion

11:50 AM-1:15 PM Lunch

1:15-3:05 PM Surgical Techniques and Maneuvers Symposium
Moderator: **Kirk H. Packo, MD** and **Stanislao Rizzo, MD**

1:15	Transitioning Vitreoretinal Surgery From Microscope to Stereoscopic Display: No Negative Impact on Surgical Times or Outcomes, Mark Barakat, MD
1:23	The Impact of Intraoperative OCT on Vitreoretinal Surgery for Proliferative Diabetic Retinopathy: Findings From the DISCOVER Study, Mehnaz Khan, MD
1:31	Comparison of Ocular Aberrations Measured by Wavefront Aberrometry Before and After Vitrectomy for Floaters, Daniel Adelberg, MD
1:39	Discussion
1:45	Primary Rhegmatogenous Retinal Detachment With Inferior Retinal Breaks Postoperative Prone Positioning Results: 1 day vs 7 days, Radwan Ajlan, MBBCh, FRCS(C)
1:53	Nonvitrectomizing Vitreous Surgery in Retinal Diseases Requiring Anti-VEGF Treatment, Andre Principe de Oliveira, MD

2:01	Surgical and Visual Outcomes of Pars Planalensectomy, With or Without Scleral Fixated Lens Implantation in Microspherophakia, Vishal Raval, MBBS, DNB, FMRF
2:09	Discussion
2:15	Refractive Vitreoretinal Surgery: Femtosecond Laser-Assisted Cataract and Vitrectomy Surgery, Stanislao Rizzo, MD
2:23	27-Gauge vs 25-Gauge Vitrectomy for Different Retinal Pathologies, Francesco Boscia, MD
2:31	Macular Hole Surgery Assisted by Perfluorocarbon Liquids, Virgilio Morales-Canton, MD
2:39	Discussion
2:45	A Novel Technique for IOL Fixation Utilizing Gore-Tex Suture, Jonathan Prenner, MD
2:53	The Removable Scleral Buckle-Back to the Future?, Paul Tornambe, MD
3:01	Discussion

3:05-3:45 PM Break

3:45-5:00 PM Instructional Courses

Yerba Buena 7-9
RETINAWs: When the Going Gets Tough, the Tough Get Going, Challenging Cases in Vitreoretinal Surgery, **Kourous A. Rezaei, MD**
Faculty: **J. Fernando Arevalo, MD, FACS ; Alay S. Banker, MD; Ehab N. El-Rayes, MD, PhD; Andre V. Gomes, MD, PhD; Yuichiro Ogura, MD; Kirk H. Packo, MD, FACS; Grazia Pertile, MD; Homayoun Tabandeh, MD; Daniele Tognetto, MD**

Nob Hill A/B
Pediatric Vitreoretinal Surgical Techniques: An Interactive Video Panel, **Cynthia A. Toth, MD**
Faculty: **Caroline Bauman, MD; Audina M. Berrocal, MD; George Caputo, MD; R.V. Paul Chan, MD; Mary Elizabeth Hartnett, MD; Michael T. Trese, MD; Lejla Vajzovic, MD**

SATURDAY, AUGUST 13

7:30-8:30 AM Continental Breakfast

8:00-8:30 AM	Instrumentation and Devices Symposium Moderators: Pravin U. Dugel, MD and Raymond Iezzi, MD, MS
8:00	A Digital Microscope Prototype: Initial Surgical Experience in Cadaveric Animal Eyes, Thomas Aaberg Jr., MD
8:08	3D Printers and Customized Vitreoretinal Forceps, David Chow, MD, FRCS(C)
8:16	Vitrectomy Infusion Control Based on Ophthalmic Artery Perfusion Pressure: A Novel Device, Tommaso Rossi, MD, EBOD
8:24	Discussion

8:30-8:45 AM	Instrumentation and Devices Symposium—Rapid Fire Papers Moderators: Pravin U. Dugel, MD and Raymond Iezzi, MD, MS
8:30	Telemedicine Image-Based Navigated Retinal Laser Therapy, Igor Kozak, MD, PhD
8:35	Sight Recovery Project for Argus II Implanted Patients Affected by Retinitis Pigmentosa, Fabio Patelli, MD
8:40	Discussion

8:45-9:20 AM	Instrumentation and Devices Expert Panel Moderator: Philip J. Ferrone, MD
8:45	Digital Electro-Optical Surgical Platform for Retina Surgery as a Replacement of Operational Microscopes, Adiel Barak, MD
8:48	Thermal Profile of a Novel Hypersonic Vitrector (HV), Victor Gonzalez, MD
8:51	Engineered Biopolymer Thin-Films for Extended Intravitreal Drug Delivery: Preclinical Feasibility Studies, Robert Bhisitkul, MD, PhD
8:54	Argus I vs Argus II: A Comparison of Two Epiretinal Prostheses, Mark Humayun, MD, PhD
8:57	Discussion

9:20-10:00 AM Break

10:00-10:30 AM	Diabetic Retinopathy 3 Symposium Moderators: Vincent S. Hau, MD, PhD and Andrew Moshfeghi, MD
10:00	Automated Diabetic Retinopathy Image Assessment Software: Study of Diagnostic Accuracy and Cost-Effectiveness of Available Systems, Adnan Tufail, MBBS, MD, FRCOphth
10:08	Aflibercept, Bevacizumab, or Ranibizumab for Diabetic Macular Edema: Two-Year Results from a Comparative Effectiveness Randomized Clinical Trial, John Wells, MD, FACS
10:16	Automated Detection of Diabetic Retinopathy Lesions on Ultra-Widefield Pseudocolor Images, Srinivas Sadda, MD
10:24	Discussion

10:30-11:10 AM	Pharmacology Symposium Moderators: Daniel F. Martin, MD and Jonathan L. Prenner, MD
10:30	Macula Society Collaborative Retrospective Study of Ocriplasmin for Vitreomacular Traction, Jennifer Lim, MD
10:38	A New Biosimilar Ranibizumab for Retinal Diseases, Alay Banker, MD
10:46	Discussion
10:50	Secondary Ocular Hypertension and the Need for Glaucoma Surgery After Dexamethasone Intravitreal Implant in Routine Clinical Practice, Jay Stewart, MD
10:58	Late Phase Fluorescein Angiographic Findings Which Can Predict Capillary Dropout and Drug Treatment Which Can Lead to Capillary Preservation, Michael Trese, MD
11:06	Discussion

11:10-11:35 AM	Retinal Detachment Symposium Moderators: Dean Elliott, MD and Geoffrey G. Emerson, MD, PhD
11:10	Management of Degenerative Retinoschisis Associated Retina Detachment, Abdallah Jeroudi, MD
11:18	Supra Choroidal Buckling for Retinal Detachment 4y Data, Ehab El-Rayes, MD, PhD
11:23	Are We Better Than We Were 10 Years Ago? An Analysis of Retinal Detachment Outcomes, Paul Hahn, MD, PhD
11:28	Discussion

11:35 AM-12:05 PM Late-breaking Abstracts
Moderator: **Netan Choudhry, MD, FRCS(C)**

12:05-1:20 PM Lunch

1:20-1:40 PM Business Meeting—ASRS Members Only

1:40-1:45 PM PAT Survey Presentation, Thomas W. Stone, MD

1:45-2:00 PM Global Trends in Retina, Kourous A. Rezaei, MD

2:00-4:45 PM	Instructional Courses
2:00-3:15 PM	Vitreoretinal Surgical Techniques (How Do I Do It). <i>Yerba Buena 12/13</i> Video panel, Ehab N. El-rayes, MD Faculty: Carl C. Awh, MD; Steve T. Charles, MD; Carl Claes, MD; Pravin U. Dugel, MD; Tarek S.Hassan, MD; Makoto Inoue, MD; Kazuaki Kadonosono, MD; Kirk H. Packo, MD, FACS; Kourous A. Rezaei, MD; Stanislaw Rizzo, MD

2:00-3:15 PM	Hands-On Introduction to Argus II Retinal Prosthesis Implantation, Ninel Z. Gregori, MD <i>Yerba Buena 14/15</i> Faculty: J. Fernando Arevalo, MD, FACS; Paul Hahn, MD, PhD; Mark S. Humayun, MD, PhD; Lisa C. Olmos de Koo, MD, MBA; Aleksandra V. Rachitskaya, MD; Stanislaw Rizzo, MD
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2:00-3:15 PM
Nob Hill C/D

Advances in the Treatment of Blinding Retinal Disease: Clinical Perspectives on Gene, Stem Cell, Cell-Based, Rescue Therapies and Drug Delivery,
Suber Huang, MD, MBA
Faculty: **Amir H. Kashani, MD, PhD; Szilard Kiss, MD; Stephen R. Russell, MD; Steven D. Schwartz, MD; Karmen Trzupek, MS**

3:15-3:45 PM **Break**

3:45-5:00 PM
Nob Hill C/D

Retinal Genetics and Gene Therapy: Diagnosis, Clinical Management, and Genetic Intervention for Inherited Retinal Disease, **Christine Kay, MD**
Faculty: **Benjamin Bakall, MD, PhD; Janet L. Davis, MD; Jacque L. Duncan, MD; Ninel Z. Gregori, MD; Yannek I. Leiderman, MD, PhD; Kimberly E. Stepien, MD; Karmen Trzupek, MS**

3:45-5:00 PM
Yerba Buena 14/15

Duke Vitreoretinal Surgical Rounds, **Lejla Vajzovic, MD**
Faculty: **Thomas A. Albini, MD; Kimberly A. Drenser, MD; Andre V. Gomes, MD, PhD; J. Michael Jumper, MD; Tamer H. Mahmoud, MD, PhD; Prithvi Mruthyunjaya, MD; Cynthia Ann Toth, MD**

3:45-5:00 PM
Yerba Buena 12/13

Understanding the Business Side of Practicing Medicine: Coding, Finances and Medical-Legal Issues,
Vincent S. Hau, MD
Faculty: **Netan Choudhry, MD, FRCS(C); Gary Edd Fish, MD, JD, MBA; Ankoor R. Shah, MD; Robert C. Wang, MD**

6:30-11:30 PM **Gala Dinner and Umbo Lounge**

SUNDAY, AUGUST 14

7:30-8:30 AM **Continental Breakfast**

8:00-9:25 AM **Inflammatory and Infectious Diseases 1 Symposium**
Moderators: **Thomas A. Albini, MD and Virgilio Morales-Canton, MD**

8:00 Fundus Findings, SD-OCT Characteristics, Treatment and Outcomes of an Outbreak of Post-Viral Fever Retinitis in Southern India: Interim Results,
Apoorva Ayachit, MS

8:08 Sarilumab for Non-infectious Uveitis (SARIL-NIU): Interim Results From the SATURN Study,
David Callanan, MD

8:16 A Randomized, Masked, Controlled, Safety and Efficacy Study of an Injectable Fluocinolone Acetonide Intravitreal Insert in Non-Infectious Uveitis, **Glenn Jaffe, MD**

8:24 Discussion

8:28 Endophthalmitis After Vitrectomy Surgery: A Case Control Analysis, **Samuel Kim, MD**

8:36 Persistently Vitreous Culture-Positive Exogenous Endophthalmitis, **Ella Leung, MD**

8:44 The Effects of Intravitreal Sirolimus on Inflammation in Non-Infectious Intermediate Uveitis: Results from SAKURA Study 1, **Pauline Merrill, MD**

8:52 Discussion

8:56 Intravitreal Sirolimus Effects on Vitreous Haze and Visual Acuity in Noninfectious Uveitis of the Posterior Segment: 12-Month SAKURA Study 1 Results,
Sunil Srivastava, MD

9:04 Ophthalmic Manifestations of Ebola Virus Disease Survivors in Monrovia, Liberia, **Steven Yeh, MD**

9:12 Comparison of Microbiology and Visual Outcomes of Patients Undergoing Small-Gauge and 20-Gauge Vitrectomy for Endophthalmitis,
David Almeida, MD, MBA, PhD

9:20 Discussion

9:25-9:45 AM **Break**

9:45-11:15 AM **Inflammatory and Infectious Diseases 2 Symposium**
Moderators: **Damien C. Rodger, MD, PhD and Steven Yeh, MD**

9:45 Clinical Course and Management of a Cluster of Post Intravitreal Bevacizumab Injection Fungal Endophthalmitis in 14 Eyes, **Mallika Goyal, MD**

9:53 Suprachoroidal Administration of Triamcinolone Acetonide: Combined Results of Phase 1/2 and Phase 2 Clinical Studies, **Seenu Hariprasad, MD**

10:01 Treatment of Uveitic Macular Edema With Corticosteroids Utilizing a Novel Approach: Suprachoroidal Injector, **Shree Kurup, MD**

10:09 Discussion

10:13 Fundus Abnormalities in Microcephalic Newborns Presumable Related With Congenital Zika Virus Infection During Epidemic in Brazil, **Mauricio Maia, MD, PhD**

10:21 Intravitreal Aflibercept Injection for Choroidal Neovascularization Secondary to Presumed Ocular Histoplasmosis Syndrome (POHS): HANDLE Study 1 Year Results, **Dennis Marcus, MD**

10:29	Primary Outcomes of the Study of Safety, Tolerability, and Bioactivity of Tocilizumab in Patients With Noninfectious UVEITIS (The STOP-UVEITIS Study), Quan Nguyen, MD, MSc
10:37	Discussion
10:41	En Face Optical Coherence Tomography and OCT Angiography of MEWDS, David Sarraf, MD
10:49	Update on the Association of Intracameral Vancomycin and Hemorrhagic Occlusive Retinal Vasculitis (HORV), Andre Witkin, MD
10:57	Discussion
11:01	Qualitative and Quantitative Analysis of Optical Coherence Tomography Angiography in Patients With Retinal Vasculitis, Angela Bessette, MD
11:06	Quantification of Blood Flow in Retinal Vasculitis Using Optical Coherence Tomography Angiography, Monica Michelotti, MD
11:11	Discussion

11:15-11:45 AM Hereditary Retinal Disease and Genetics Symposium Moderators: **Hossein Ameri, MD, PhD, FRCSI, MRCOphth** and **Charles C. Wykoff, MD**

11:15	Subthreshold Diode Micropulse Laser (SDM) as Retinal Protective Therapy for Non-age Related Retinal Degenerations, Jeffrey Luttrull, MD
11:23	Visual Acuity Sensitivity/Subgroup Analyses from a Phase 3 Trial of AAV2-hRPE65v2 (SPK-RPE65) in RPE65 Mutation-Associated Inherited Retinal Dystrophy, Stephen Russell, MD
11:31	North Carolina Macular Dystrophy (MCDRI): Mutations Found Affecting PRDM13, Kent Small, MD
11:39	Discussion

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