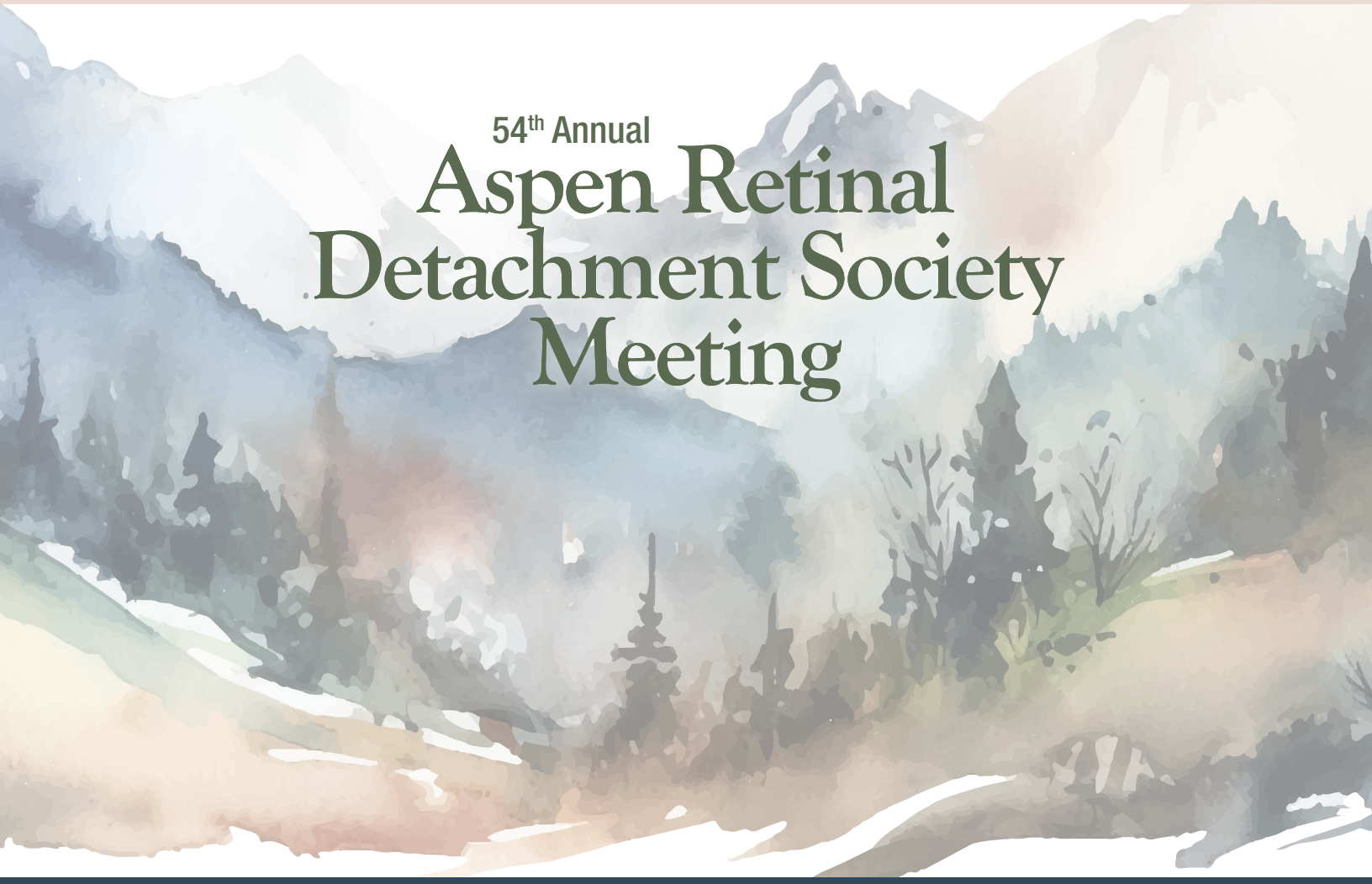
THE ASPEN RETINAL DETACHMENT SOCIETY

"Oh vitreous where is thy humor?"

ARDS 2026



54th Annual Aspen Retinal Detachment Society Meeting

FEBRUARY 28 - MARCH 4, 2026 • SNOWMASS, COLORADO

JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

ACCREDITATION

In support of improving patient care, this activity has been planned and implemented by Cine-Med and Medical Conference Planners International. Cine-Med is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

PHYSICIANS

Cine-Med designates this live activity for a maximum of ***12 AMA PRA Category 1 Credit(s)™***. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

OTHER HEALTHCARE PROFESSIONALS

All other healthcare professionals will receive a Certificate of Participation. For information on the applicability and acceptance of Certificates of Participation for activities designated for ***AMA PRA Category 1 Credits™***, consult your professional licensing board.

ARDS 2026

Dear Colleagues,

Welcome to the 54th Aspen Retinal Detachment Society (ARDS) Annual Meeting. This year continues our tradition of long-format presentations, panel discussions, and guidance interaction focused on vitreoretinal surgical diseases. Speakers at ARDS continue to be remarkable leaders in the field of retina, and many of our most significant advances were first discussed at this meeting. Remarkably, nothing has stopped the ARDS meeting – much like our specialty overall, we have continued through pandemic, economic turmoil, and terrorism.

For this year, as always, our named Lectures highlight our program. For ARDS 2026, the Founders Lecture delivered by Dr. Carl Awh will enhance our understanding of illumination during surgical viewing along with the evolution and impact of lighting to enhance our surgical approach. The Taylor Smith/Victor Curtin Lecture will be unique this year with Dr. Tarek Hassan speaking to innovation, understanding, and potential flaws in our understanding and treatment of retinal disease. Both of these speakers bring a wealth of knowledge, along with hands-on patient care experience to their presentations and discussions. This expertise remains a hallmark of ARDS.

In addition, our speakers truly represent the ARDS commitment to both advancement and education within our field. Dr. Allen Ho will continue our surgical focus with pearls related to the delivery of gene and cell therapies along with an update on optogenetics. Dr. Aleksandra Rachitskaya will tackle the concerns for GLP-1 therapies as they impact the retina and an overview of the controversies in retinoschisis management both in and out of the OR. ARDS continues to bring "younger" speakers to the podium and Dr. Jacque Duncan, Dr. Lucia Sobrin and Dr. Tara McCannel will focus their expertise on MacTel, the importance and impact of clinical trials in retinal disease, advancing diagnostics for uveitis, along with the challenges in auto-immune retinal diseases, and the evolution of biopsy for uveal melanoma and the importance of evolving clinical mindsets with advances in imaging and therapeutics Dr. Bob Avery will bring his financial expertise to our understanding of practice models in retina and will discuss the current and potential impact of Artificial Intelligence within our specialty. Finally, Dr. David Chow will bring us back to surgical retina with a discussion of advanced surgical techniques and the use of a macular "rounds" format to encourage audience participation and explore the diversity of surgical approaches in our field.

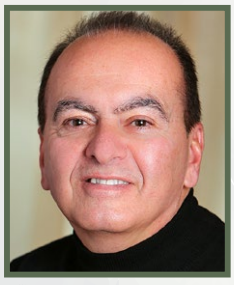
As always, the long format lectures will be followed by interactive discussions from our members, and each day will include a specialty panel discussing the real-world impact of medical and surgical advances in retina. Further, we will continue to include morning sessions (for those interested) that will be case-based interactive discussions.

The 54th Annual Meeting will further a meeting that is unique in our field. Incorporating outstanding speakers capable of integrating research advances, both surgical and medical, into the immediate world of clinical care, these presentations and panels deliver state-of-the-art information from top practitioners with insightful interactive discussions.

Speaking for the ARDS leadership, the uniqueness of this meeting, its caliber and impact, owe much to the incredible individuals who have spoken over these five decades but ALSO to our amazing members whose targeted questions and impactful comments anchor ARDS at its clinical roots.

Best regards,

R.V. Paul Chan, MD, MSc, MBA
Program Director



Donald J. D'Amico, MD
Program Director

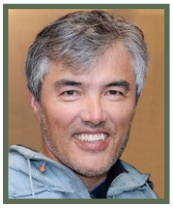
Timothy G. Murray, MD, MBA
Program Director

Karen Baranick
President,
Medical Conference Planners, Inc.

Guest Faculty

Robert L. Avery, MD
California Retina Consultants
Santa Barbara, CA

Carl C. Awh, MD
Tennessee Retina
Nashville, TN
FOUNDERS LECTURE

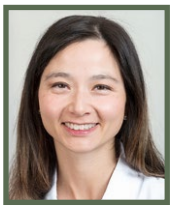


David R. Chow, MD
Toronto Retina Institute
North York, Canada

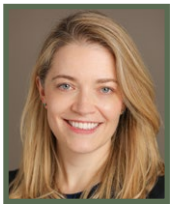
Jacque L. Duncan, MD
University of California,
San Francisco
San Francisco, CA

Tarek S. Hassan, MD
Associated Retinal
Consultants
Royal Oak, MI
TAYLOR SMITH &
VICTOR CURTIN LECTURE

Allen C. Ho, MD
Mid Atlantic Retina/
Wills Eye Hospital
Bryn Mawr, PA



Tara A. McCannel, MD, PhD
UCLA, Jules Stein Eye Institute
Los Angeles, CA



Aleksandra V. Rachitskaya, MD
Cole Eye Institute,
Cleveland Clinic
Cleveland, OH

Lucia Sobrin, MD, MPH
Massachusetts Eye and Ear
Boston, MA

Program Directors

R.V. Paul Chan, MD, MSc, MBA
UIC/Illinois Eye and
Ear Infirmary
Chicago, IL

Donald J. D'Amico, MD
Weil Cornell Medicine
Ophthalmology
New York, NY

Timothy G. Murray, MD, MBA
Murray Ocular Oncology
and Retina
Miami, FL

Founders

William O. Edward, MD
1930-2012

Ottiwell W. Jones, III, MD
1932-2024

Meeting Planner

Karen Baranick
Medical Conference
Planners, Inc.
Los Angeles, CA

15th ANNUAL FOUNDERS LECTURE

MONDAY, MARCH 2, 2026 | 6:55 PM

The Light Within: Innovation in Vitreoretinal Surgical Illumination

CARL C. AWH, MD

Carl C. Awh (pronounced "Oh"), MD is the president of Tennessee Retina, a 14-physician private retina practice headquartered in Nashville, Tennessee. He completed a fellowship in vitreoretinal surgery at the Duke University Eye Center with Dr. Robert Machemer and began his career at the Wilmer Eye Institute, where he was the founding co-director of the Johns Hopkins Microsurgery Advanced Design Laboratory. He is an active clinical trial investigator, has 28 issued or pending U.S. patents for surgical devices and treatments, and has designed dozens of commercially successful vitreoretinal surgical instruments. Dr. Awh has lectured in over thirty countries and on every continent (except Antarctica!). He is a Past-President of the American Society of Retina Specialists and a past member of the board of EURETINA, the European Retina Society. He is the co-founder and course director of the Retina Fellows Forum, an annual meeting for senior vitreoretinal fellows which has hosted around 1800 attendees since its inaugural meeting in 2001.

Dr. Awh has been named to the "Best Doctors in America" every year since 2007 and is the recipient of Honor Awards and Senior Honor Awards from both the American Society of Retina Specialists and the American Academy of Ophthalmology. In 2021 he received the Presidential Honor Award from the ASRS and was named a Fellow of the ASRS. Dr. Awh was inducted as an inaugural member of the Retina Hall of Fame in 2017. He is the happily married father of three and enjoys golf, hiking, and travel.

Founders Honorees

2012 Steve T. Charles, MD
2013 Joan W. Miller, MD
2014 Carl D. Regillo, MD
2015 Dean Eliott, MD
2016 Mark W. Johnson, MD
2017 Mark S. Humayun, MD, PhD
2018 Maria H. Berrocal, MD
2019 Allen C. Ho, MD
2020 Glenn J. Jaffe, MD
2021 Dennis P. Han, MD
2022 H. Culver Boldt, MD
2023 Gregg T. Kokame, MD, MMM
2024 K. Bailey Freund, MD
2025 Audina M. Berrocal, MD
2026 Carl C. Awh, MD

44th ANNUAL TAYLOR SMITH & VICTOR CURTIN LECTURE

TUESDAY, MARCH 3, 2026 | 6:55 PM

Seemed Like a Good Idea at the Time...How Our Thinking as Doctors is Often Flawed

TAREK S. HASSAN, MD

Tarek S. Hassan, MD is Professor of Ophthalmology at Oakland University William Beaumont School of Medicine Program and Senior Partner at Associated Retinal Consultants in Royal Oak, Michigan. He is the Immediate Past President of the Retina Hall of Fame, Past President of the Retina World Congress (RWC), Past President of the American Society of Retina Specialists (ASRS), and Past President of the Foundation of the ASRS. He has been on the Founder's Board, Executive Board, and Board of Directors of the RWC for the past 9 years. He served on the Executive Committee of both the ASRS and the Foundation of the ASRS for 12 years and was on the ASRS Board of Directors for 22 years.

Dr. Hassan is a Founder and Director of the Retina Hall of Fame (10 years), Retina Fellows Forum (26 years), and Club Vit (26 years). He has served as the President of Club Vit for 26 years. He has organized and chaired 85 national and international meetings and served as Program Chairman for two ASRS Annual Meetings and two Retina Subspecialty Day Meetings of the American Academy of Ophthalmology (AAO).

Dr. Hassan has served as principal or co-investigator in more than 180 multicenter national trials. He has authored and co-authored 243 papers in peer-reviewed journals and 9 books and medical book chapters. He founded and was Senior Associate Editor of the Journal of Vitreoretinal Diseases and is currently a scientific reviewer for many leading journals in ophthalmology and an editorial board member of several. He has lectured extensively nationally and internationally, giving over 840 presentations on numerous retinal topics. He was awarded the AAO Achievement Award in 2003, the ASRS Senior Honor Award in 2004, and the AAO Senior Achievement Award in 2013. He has been named to the "Best Doctors in America" listing every year since 2000 and was elected as an inaugural member of the Retina Hall of Fame in 2017. He has trained 65 clinical vitreoretinal fellows and 30 international research fellows. He founded or co-founded 6 medical device and/or educational companies and holds numerous United States government-issued patents.

Taylor Smith & Victor Curtin Honorees*

1983	Thomas M. Aaberg, Sr., MD	1994	Charles P. Wilkinson, MD	2005	Thaddeus P. Dryja, MD	2016	Neil M. Bressler, MD
1984	Robert E. Morris, MD	1995	George W. Blankenship, MD	2006	Jerry A. Shields, MD	2017	Gary W. Abrams, MD
1985	Michael Shea, MD	1996	Mary Lou Lewis, MD	2007	Mark S. Blumenkranz, MD	2018	Daniel F. Martin, MD
1986	Alexander Ray Irvine, Jr., MD	1997	Donald J. D'Amico, MD	2008	Allan E. Kreiger, MD	2019	Yale L. Fisher, MD
1987	William H. Spencer, MD	1998	Stanley Chang, MD	2009	Alexander R. Gaudio, MD	2020	Carol L. Shields, MD
1988	Victor T. Curtin, MD	1999	Harry W. Flynn, Jr., MD	2010	Carmen A. Puliafito, MD, MBA	2021	Robert L. Avery, MD
1989	Alan Bird, MD	2000	Ian J. Constable, MD	2011	David W. Parke, II, MD	2022	Timothy G. Murray, MD, MBA
1990	J. Donald M. Gass, MD	2001	Thomas R. Friberg, MD	2012	J. Brooks Crawford, MD	2023	Giovanni Staurenghi, MD
1991	Robert J. Brockhurst, MD	2002	William S. Tasman, MD	2013	Michael T. Trese, MD	2024	David S. Boyer, MD
1992	Stephen J. Ryan, MD	2003	Evangelos S. Gragoudas, MD	2014	Julia A. Haller, MD	2025	John T. Thompson, MD
1993	Wayne E. Fung, MD	2004	Steve T. Charles, MD	2015	George A. Williams, MD	2026	Tarek S. Hassan, MD

*Prior to 2017, this lecture was known as the Taylor Smith Lecture.

ARDS 2026

PROGRAM AT A GLANCE

Saturday

FEBRUARY 28, 2026

4:00 – 9:00 PM
Registration

6:00 – 9:00 PM
Welcome Dinner

Sunday

MARCH 1, 2026

3:15 – 3:45 PM
Break

3:15 – 7:30 PM
Exhibits

3:45 – 4:00 PM
Welcome Remarks
Timothy G. Murray, MD, MBA

4:00 – 4:20 PM
The Effect of GLP-1 Receptor Agonists on Retinal Disease
Aleksandra V. Rachitskaya, MD

4:20 – 4:35 PM
Discussion

4:35 – 4:55 PM
Surgical Tips and Delivery of Gene and Cell Therapies
Allen C. Ho, MD

4:55 – 5:10 PM
Discussion

5:10 – 5:30 PM
Sustained Delivery, Sustained Vision: Integrating the Port Delivery System (Susvimo) into Real-World Retina Practice
Carl C. Awh, MD

5:30 – 5:45 PM
Discussion

5:45 – 6:15 PM
Break

6:15 – 6:35 PM
Encelto for MacTel: Potential and Pitfalls
Jacque L. Duncan, MD

6:35 – 6:50 PM
Discussion

6:50 – 7:30 PM

PANEL 1:
Advances in Surgical Retina
Moderator:
Timothy G. Murray, MD, MBA

Panelists:
Carl C. Awh, MD
Jacque L. Duncan, MD
Allen C. Ho, MD
Aleksandra V. Rachitskaya, MD

Monday

MARCH 2, 2026

7:30 – 9:00 AM
Satellite Symposium with Breakfast (non-CME)^

7:30 – 8:00 AM
Breakfast

8:00 – 9:00 AM
Ozurdex® in the Treatment of Diabetic Macular Edema (DME)
Lejla Vajzovic, MD
(Sponsored by AbbVie)

3:30 – 4:00 PM
Break

3:30 – 7:30 PM
Exhibits

4:00 – 4:20 PM
Clinical Trials in Retinal Degenerations: Where Do We Go from Here?
Jacque L. Duncan, MD

4:20 – 4:35 PM
Discussion

4:35 – 4:55 PM
Advancing Diagnostics on Ocular Fluids for Uveitis and Endophthalmitis
Lucia Sobrin, MD, MPH

4:55 – 5:10 PM
Discussion

5:10 – 5:30 PM
Prognostic Biopsy in Uveal Melanoma – My 20-Year Journey
Tara A. McCannel, MD, PhD

5:30 – 5:45 PM
Discussion

5:45 – 6:15 PM
Break

6:15 – 6:55 PM

PANEL 2:
Drug Treatments We Use and New Ones in the Pipeline
Moderator:
Donald J. D'Amico, MD

Panelists:
Jacque L. Duncan, MD
Tarek S. Hassan, MD
Tara A. McCannel, MD, PhD
Lucia Sobrin, MD, MPH

6:55 – 7:00 PM
Introduction of Founders Lecture
Timothy G. Murray, MD, MBA

7:00 – 7:20 PM

15TH ANNUAL FOUNDERS LECTURE
The Light Within: Innovation in Vitreoretinal Surgical Illumination
Carl C. Awh, MD

7:20 – 7:30 PM
Discussion

8:00 – 10:00 PM
Faculty Dinner

Tuesday

MARCH 3, 2026

7:30 – 9:00 AM

Satellite Symposium with Breakfast (non-CME)^

7:30 – 8:00 AM

Breakfast

8:00 – 9:00 AM

EYLEA HD in Patients with Wet AMD, DME, and MEfRVO

Scott J. Westhouse, DO
(Sponsored by Regeneron Pharmaceuticals, Inc.)

9:00 – 10:00 AM

Case Discussion with Experts (non-CME)^

Moderators:
R.V. Paul Chan, MD, MSc, MBA & Timothy G. Murray, MD, MBA

11:00 AM – 2:00 PM

NASTAR Ski Race and Picnic Lunch

3:30 – 4:00 PM

Break

3:30 – 7:30 PM

Exhibits

4:00 – 4:20 PM

AI in the Practice of Retina

Robert L. Avery, MD

4:20 – 4:35 PM

Discussion

4:35 – 4:55 PM

The Natural History and Surgical Approaches to Schisis-Detachments

Aleksandra V. Rachitskaya, MD

4:55 – 5:10 PM

Discussion

5:10 – 5:30 PM

Surgical Tips and Techniques

David R. Chow, MD

5:30 – 5:45 PM

Discussion

5:45 – 6:15 PM

Break

6:15 – 6:35 PM

Next Generation Optogenetic Strategy for Advanced Retinal and Macular Degenerations

Allen C. Ho, MD

6:35 – 6:50 PM

Discussion

6:50 – 6:55 PM

Introduction of Taylor Smith & Victor Curtin Lecture

Donald J. D'Amico, MD

6:55 – 7:20 PM

44TH ANNUAL TAYLOR SMITH & VICTOR CURTIN LECTURE

Seemed Like a Good Idea at the Time…How Our Thinking as Doctors is Often Flawed

Tarek S. Hassan, MD

7:20 – 7:30 PM

Discussion

8:00 – 10:00 PM

Closing Dinner

Wednesday

MARCH 4, 2026

7:30 – 9:00 AM

Case Discussion with Breakfast (non-CME)^

7:30 – 8:00 AM

Breakfast

8:00 – 9:00 AM

Case Discussion with Experts

Moderators:
R.V. Paul Chan, MD, MSc, MBA & Timothy G. Murray, MD, MBA

3:30 – 4:00 PM

Break

3:30 – 7:30 PM

Exhibits

4:00 – 4:20 PM

How is Private Equity Changing the Practice of Retina?

Robert L. Avery, MD

4:20 – 4:35 PM

Discussion

4:35 – 4:55 PM

Autoimmune Retinopathy: Challenges in Diagnosis and Treatment

Lucia Sobrin, MD, MPH

4:55 – 5:10 PM

Discussion

5:10 – 5:30 PM

Macular Surgery Rounds

David R. Chow, MD

5:30 – 5:45 PM

Discussion

5:45 – 6:15 PM

Break

6:15 – 6:35 PM

Reframing Mindsets in Ocular Cancer and Vision Loss

Tara A. McCannel, MD, PhD

6:35 – 6:50 PM

Discussion

6:50 – 7:30 PM

PANEL 3:

Surgical Retina: Trauma, Uveitis, and Visualization

Moderator:
R.V. Paul Chan, MD, MBA, MSc

Panelists:
Robert L. Avery, MD
David R. Chow, MD
Tara A. McCannel, MD, PhD
Lucia Sobrin, MD, MPH

7:30 PM

Adjourn

^Not part of the educational activity.

Sunday | MARCH 1

4:00 – 4:20 PM

The Effect of GLP-1 Receptor Agonists on Retinal Disease

ALEKSANDRA V. RACHITSKAYA, MD

Glucagon-like peptide-1 receptor agonists (GLP-1RA) are a class of medications being used with increased frequency in the management of type 2 diabetes mellitus and obesity. The effect of GLP-1RA on such conditions as diabetic retinopathy, AMD, and other eye conditions is controversial. This presentation will focus on the effect of this drug class on eye conditions including diabetic retinopathy and AMD.

4:35 – 4:55 PM

Surgical Tips and Delivery of Gene and Cell Therapies

ALLEN C. HO, MD

Delivery strategies for potential gene and cell therapies continue to evolve with both office-based and surgical operating room-based techniques. Progress with new surgical instrumentation, new surgical techniques and intraoperative imaging have improved the precision of subretinal and suprachoroidal delivery of gene and cell therapy. Improving gene and cell therapies requires not only refining viral vectors, transgenes and cell lines but also improving surgical delivery techniques and designing new instrumentation to achieve these goals.

Subretinal delivery can be quantified with imaging techniques to determine dosing consistency; a retinotomy necessarily creates variable dosing. Suprachoroidal to subretinal delivery can be achieved without the need for vitrectomy or without the need for retinotomy which may improve dosing precision and safety by reducing efflux into the vitreous cavity. A suprachoroidal delivery syringe is FDA approved and new tools and techniques for suprachoroidal delivery evolve including illuminated catheters.

A new office-based device is in development for targeted delivery to the suprachoroidal space and targeted delivery to the subretinal space. Consistent dosing and sequestration of the investigational agents accurately to target tissues may be important for safety, efficacy and adoption of potential gene and cell therapies.

5:10 – 5:30 PM

Sustained Delivery, Sustained Vision: Integrating the Port Delivery System (Susvimo) into Real-World Retina Practice

CARL C. AWH, MD

Sustained anti-VEGF delivery via the Port Delivery System (Susvimo) can reshape the management of neovascular age related macular degeneration and diabetic macular edema. The PDS addresses a fundamental clinical problem: treatment burden. Frequent intravitreal injections create challenges for patients, caregivers, and clinics; and real-world outcomes typically fall short of clinical trial results because of undertreatment. Sustained drug delivery can maintain vision while reducing visit and injection frequency.

I will review the design of the Port Delivery System, a surgically implanted, refillable reservoir that delivers continuous intraocular ranibizumab. I'll review the latest available clinical trial data, including the longest-term clinical trial outcomes data of any anti-VEGF treatment. I will discuss safety considerations, including endophthalmitis risk, conjunctival management, and the importance of meticulous surgical technique and postoperative monitoring.

Patient selection for PDS/Susvimo is important and ideal candidates are not necessarily obvious. Reasonable candidates include patients with demonstrated anti-VEGF responsiveness who require frequent injections but have difficulty maintaining the necessary treatment schedules. The patient who requires injections every 28 days may seem an obvious candidate, but I recommend selecting patients who require injections at a 6- to 8-week interval as first cases, for reasons I'll discuss.

I've developed modifications to the surgical procedure and refill-exchange procedure. I will review these with video and clinical images.

The PDS/Susvimo is the first in the inevitable shift toward significantly longer-acting retinal therapeutics. No other available treatment offers the long-term visual outcomes demonstrated with PDS/Susvimo. There is an understandable barrier to entry, but the rewards are worth the effort.

6:15 – 6:35 PM

Encelto for MacTel: Potential and Pitfalls

JACQUE L. DUNCAN, MD

Ciliary neurotrophic factor (CNTF) has been studied as a treatment to preserve photoreceptors in retinal degenerative diseases, including macular telangiectasia type 2 (MacTel). Results from two identical multicenter, randomized trials (NTMT-03-A and NTMT-03-B) evaluating revakinagene taroretcel (NT-501), a surgically implanted device delivering CNTF long-term, demonstrated significantly less ellipsoid zone area (EZA) loss in treated eyes over 24 months compared to sham-treated eyes, marking the first effective treatment to slow photoreceptor loss in MacTel.

However, differences between trials raise questions. NTMT-03-A showed greater EZA loss reduction (54.8%, $P < 0.001$) compared to NTMT-03-B (30.6%, $P < 0.02$). Retinal sensitivity loss was significantly improved in NTMT-03-A, but not NTMT-03-B. Disease severity appeared to influence outcomes, with more severe cases in NTMT-03-A showing better response to NT-501. Subgroup analyses revealed younger participants, those with less EZA loss at baseline, and diabetic patients benefited more from treatment. Geographic differences also emerged, as Australian participants had better responses to NT-501 than those from the US or Europe, suggesting genetic or environmental factors may influence treatment efficacy.

Although structural improvements were reported in both trials, visual function outcomes, such as reading speed, visual acuity, and retinal sensitivity, were inconsistent across trials. Side effects, including delayed dark adaptation and pupil size reduction, were more common in NT-501-treated eyes. The trials demonstrated reduced disease progression in Macular Telangiectasia type, and further studies will help identify patients most likely to benefit and understand discrepancies in visual function improvements.

6:50 – 7:30 PM

PANEL 1:

Advances in Surgical Retina

MODERATOR:
TIMOTHY G. MURRAY, MD, MBA

PANELISTS:
CARL C. AWH, MD
JACQUE L. DUNCAN, MD
ALLEN C. HO, MD
ALEKSANDRA V. RACHITSKAYA, MD

This panel will incorporate a case-based approach to report and discuss major advances in the field of surgical retina. An expert panel will discuss evolving indications for surgery, enhanced pre-operative testing including pre-surgical imaging focused on surgical planning, evolutions in surgical platforms and instrumentation, and incorporation of advanced pharmacologic care to achieve best anatomic and visual outcomes for our patients.

Monday | MARCH 2

4:00 – 4:20 PM

Clinical Trials in Retinal Degenerations: Where Do We Go from Here?

JACQUE L. DUNCAN, MD

Inherited retinal degenerations are rare, genetically diverse, and clinically variable, making them difficult to diagnose and treat. Currently, voretigene neparvovec-ryzl is the only approved treatment for early-onset retinal degeneration associated with RPE65 variants. Challenges in developing treatments include the rarity of these conditions, genetic heterogeneity, clinical variability, and late diagnosis when significant photoreceptor loss has already occurred. Additionally, genetic testing often fails to identify a definitive cause in 20-30% of cases.

Gene-specific therapies are in development for conditions such as achromatopsia, Stargardt disease, Batten disease, choroideremia, Leber congenital amaurosis (LCA), X-linked retinitis pigmentosa (RP), autosomal dominant RP, and autosomal recessive RP. Techniques include gene augmentation, antisense oligonucleotides for splicing defects in large genes, and CRISPR gene editing, which has shown promise in treating CEP290-related retinal degeneration. Early trials have demonstrated safety and even improved vision in some patients with severe early-onset vision loss, offering proof of principle that gene therapies can restore vision in adulthood.

Non-gene-specific trials are also underway, aiming to prevent photoreceptor degeneration, reduce oxidative stress, or improve visual function in RP and Usher syndrome. Advanced vision loss treatments include electrical stimulation and optogenetics to make non-photoreceptor retinal cells responsive to light.

Lessons from early-phase trials and natural history studies are crucial for designing effective Phase 3 trials. Efforts like the RUSH2A study and the REDI working group aim to develop evidence-based outcome measures that reflect patient experiences, guiding future clinical trial design. Despite challenges, progress in gene and non-gene-specific therapies offers hope for patients with retinal degenerations.

4:35 – 4:55 PM

Advancing Diagnostics on Ocular Fluids for Uveitis and Endophthalmitis

LUCIA SOBRIN, MD, MPH

Infectious uveitis and endophthalmitis are conditions that can quickly lead to severe vision loss if not promptly treated. Rapid institution of effective treatment is aided significantly by early identification of the causative microbe. The commonly available methods for identifying organisms are culture and polymerase chain reaction (PCR). The turnaround times for cultures are several days and there are high rates of negative cultures in endophthalmitis. PCR is more sensitive but also has a turnaround time of several days and testing for multiple organisms is often limited by the low volume of ocular fluids that can be obtained. In this talk, we will cover emerging technologies that can help us overcome these limitations. In particular, we will discuss highly multiplexed NanoString ocular infection panels and metagenomic next generation sequencing. We will show how these tests have a high sensitivity, allow sampling for multiple organisms with one small volume sample, have fast turnaround times and can reveal causative microorganisms that the physician may not be expecting based on the clinical appearance. These advancements can lead to the faster delivery of targeted, effective therapy and thus hopefully improve outcomes in infectious uveitis and endophthalmitis.

5:10 – 5:30 PM

Prognostic Biopsy in Uveal Melanoma – My 20-Year Journey

TARA A. McCANNEL, MD, PhD

Biopsying uveal melanoma for prognostication evolved in the early 2000s about a decade after scientists discovered karyotypic differences among uveal melanoma cells that influenced the risk of metastasis. Uveal melanoma, the most common primary tumor of the eye in adults has been fraught with controversy – mostly due to our utter lack of understanding of how this cancer behaves. Fears of dissemination with ocular and tumor manipulation persist to this day, although there remains no substantial evidence. UCLA was the first center in North America to publish the feasibility of in vivo biopsy. Prior to this, needles were only placed into uveal melanoma eyes that had been managed with enucleation. We evolved multiple techniques over the years at UCLA, and it was patient demand that ultimately pushed prognostic biopsy into a standard of patient care procedure in uveal melanoma management today. A review of the history, techniques, ways that results can be shared to benefit patients and continued controversies of the expanding use of prognostic biopsy will be discussed.

6:15 – 6:55 PM

PANEL 2:

Drug Treatments We Use and New Ones in the Pipeline

MODERATOR:
DONALD J. D'AMICO, MD

PANELISTS:
JACQUE L. DUNCAN, MD
TAREK S. HASSAN, MD
TARA A. McCANNEL, MD, PhD
LUCIA SOBRIN, MD, MPH

This expert and interactive panel will explore the rapidly expanding and increasingly sophisticated pharmacologic therapies for many retinal diseases. Both proven and promising approaches will be discussed including new antibodies and other agents from the wider class of biologics, encapsulated cell therapy, implantable drug reservoirs and drug-eluting materials, gene therapy by a variety of anatomic approaches, stem cell treatments, and more. The panel will explore both the potential promise and the limitations of each of these platforms with a highlight on unique complications that may be encountered. Audience

participation will be encouraged and will allow all participants to become familiar with the most current agent and trends in retinal pharmacology.

7:00 – 7:20 PM

15TH ANNUAL FOUNDERS LECTURE

The Light Within: Innovation in Vitreoretinal Surgical Illumination

CARL C. AWH, MD

Vitreoretinal surgery is a relatively young discipline. Robert Machemer's first pars plana vitrectomy was performed on April 20, 1970. Machemer initially used external microscope illumination, which had significant limitations. Working with Jean-Marie Parel at Bascom Palmer, he pioneered the use of fiberoptic illumination, which became the standard for endoillumination during vitreous surgery.

I will review the evolution of light sources, from halogen to others including xenon, mercury-vapor, light-emitting diode(LED); and, finally, laser light.

Optimal illumination for vitreoretinal surgery demands high luminance at the target, while meeting the following requirements:

- minimal heat delivered to tissues
- minimal phototoxic retinal hazard
- addressing geometric constraints imposed by the anatomy of the eye

As intraocular illumination became brighter, a limiting factor became potential phototoxicity, not merely visibility. This led to refinements in the following:

- filtering IR/UV
- controlling spectrum
- minimizing exposure time
- optimizing working distance

I will review the development and evolution of illumination technologies that have improved surgeons' ability to address complex vitreoretinal pathology. Among these are chandelier illumination and illuminated multifunction intraocular instruments.

I will conclude with a discussion on laser illumination. Laser illumination offers potential advantages including narrower spectral bandwidth, higher coupling efficiency, improved depth penetration, and potentially reduced phototoxicity through wavelength optimization. Early experimental and translational work suggests laser illumination may enable improved visualization through optical fibers much smaller in diameter than the current standard. One device that could provide significant new advantages to vitreoretinal surgeons is an illuminated vitreous cutter, which should be feasible using laser illumination.

Tuesday | MARCH 3

4:00 – 4:20 PM

AI in the Practice of Retina

ROBERT L. AVERY, MD

Artificial Intelligence is beginning to reshape so many businesses and professions, so it's no surprise that it is already affecting the clinical practice of retina. There are several major components of our practice where AI is already having an effect.

Screening / Diagnosis: The first fully autonomous AI system in any field of medicine to receive FDA clearance was for diabetic retinopathy screening. With further adoption, these devices could not only improve early diagnosis of diabetic retinopathy, but could improve the mix of patients in our retina clinics, eliminating the need for us to see patients with diabetes but without retinopathy.

Early Detection: Along similar lines, those patients already in our practice with AMD, for instance, can use AI based home monitoring employing preferential hyperacuity with either a home based machine or an app on a smart phone to detect conversion to exudative AMD.

Monitoring: For patients already undergoing injections, home OCT, which is only possible with AI data analysis, offers a major advance in monitoring the patient's response to therapy and can precisely determine when a drug wears off and needs to be reinjected. It could yield more precise data in regard to which drug lasts longer in a given patient, and could also allow us to more quickly extend intervals between visits.

Workflow: An example of an office-based management system will be discussed which integrates AI analysis of prior OCTs with visual acuity and injection data from the EMR into a single summary screen – which can be quite helpful when taking over the care of a patient and deciding which drug to use and when to have the patient return.

Decision Making: AI allows for a precise assessment of ellipsoid zone loss, which has therapeutic implications, not only in MacTel, but also in GA, where it has been shown to correlate with more

rapid progression as well as improved treatment benefit. We could potentially improve the risk/benefit analysis to the patient considering treatment.

4:35 – 4:55 PM

The Natural History and Surgical Approaches to Schisis-Detachments

ALEKSANDRA V. RACHITSKAYA, MD

The frequency of follow-up and need for intervention in cases of retinoschisis with an associated outer retinal hole is controversial. The risk of progression to rhegmatogenous retinal detachment as well as the clinical findings and imaging biomarkers of progression are not well established. The current presentation will focus on examining the cases of retinoschisis with an associated outer retinal hole progressing to rhegmatogenous retinal detachment. The particular focus will be on surgical technique and the role of intra-operative imaging in identifying the retinal pathology and guiding surgical decision making.

5:10 – 5:30 PM

Surgical Tips and Techniques

DAVID R. CHOW, MD

Over the years various forms of surgical instrumentation were tested by the author to determine the optimal usage to perform surgery more safely and more efficiently. Fluidics, visualization, and most recently fragmentation will all be discussed.

6:15 – 6:35 PM

Next Generation Optogenetic Strategy for Advanced Retinal and Macular Degenerations

ALLEN C. HO, MD

Optogenetics aims to restore light sensitivity to retinal cells that survive after photoreceptors have been lost. Instead of replacing rods and cones, optogenetics delivers a transgene encoding for a light-responsive protein (a synthetic bioengineered opsin, consider our native opsin - rhodopsin) into residual bipolar or ganglion cells using an adeno-associated viral (AAV) vector. These cells are then "reprogrammed or reanimated" to respond to ambient light and transmit visual signals through existing retinal circuitry to the brain. Optogenetics is a mutation-agnostic approach and therefore broadly attractive for patients with myriad genetic mutations and advanced retinal degenerations where photoreceptors are absent and conventional gene replacement is no longer feasible.

The MCO-010 program uses a bioengineered proprietary next generation multi-characteristic opsin (MCO) designed to function under ordinary light without the need for signal amplifying goggles. Delivered via a single office-based intravitreal injection, MCO-010 targets bipolar cells. The phase 2/3 randomized, sham controlled multicenter RESTORE and REMAIN clinical trials in subjects with advanced retinitis pigmentosa demonstrate clinically meaningful and durable improvements in visual acuity in subjects with profound vision loss with good safety and is currently in fast-track and orphan disease FDA BLA submission.

This platform has clear appeal for Stargardt disease (phase 2 STARLIGHT and SUSTAIN trials) and AMD Geographic atrophy. An optogenetic strategy that restores central macular responsiveness may offer a new vision restoration paradigm for atrophic macular disorders where no vision improving strategy currently exists.

6:55 – 7:20 PM

44TH ANNUAL
TAYLOR SMITH & VICTOR CURTIN LECTURE

Seemed Like a Good Idea at the Time…How Our Thinking as Doctors is Often Flawed

TAREK S. HASSAN, MD

Despite having exceptional intelligence and rigorous training, physicians are systematically prone to predictable flaws in logical thinking. Medical education prioritizes rapid pattern recognition under conditions of uncertainty rather than formal logic or probabilistic reasoning. As a result, we develop powerful cognitive adaptations that serve us well in acute clinical settings—but become maladaptive elsewhere. In short, we see the world not as it is, but as we perceive it to be.

We will discuss the "mind traps" that undermine clinical reasoning by retina specialists and show how these biases extend far beyond individual patient encounters to distort our entire specialty's knowledge ecosystem. When cognitive errors lead us to misinterpret data, the consequences cascade: we pass flawed reasoning to fellows, publish misleading conclusions that shape practice guidelines, present biased case series at conferences, and foster groupthink that resists contradictory evidence. These same systematic errors influence

research design, trial interpretation, technology evaluation, and surgical outcome assessment—ultimately skewing the flow of information across retina and medicine more broadly.

The cognitive vulnerabilities that shape our medical decisions do not vanish when we step outside the clinic. Because our professional identity is so intertwined with these thought patterns, we remain equally susceptible to them in personal life—from financial choices and relationship conflicts to political convictions.

Through retina-specific examples, we will identify some hardwired errors as the first step to building practical decision frameworks to counteract them. The most effective clinicians are not without these biases, but they have the deepest insight into their own cognitive blind spots.

Wednesday | MARCH 4

4:00 – 4:20 PM

How is Private Equity Changing the Practice of Retina?

ROBERT L. AVERY, MD

There has been a dramatic increase in the acquisition of retina practices by Private Equity over the past few years, and this consolidation has impacted the practice of retina is several ways. There are fewer independent retina practices, as many groups have merged to form a few larger ones, including one very large group with specialists in 24 states. This consolidation has led to different changes to different stakeholders. For the doctors merging to form these entities or selling into an existing one, there are tradeoffs to consider such as: an initial sizable upfront cash payment with reduced subsequent annual income vs. more unlimited upside annual income if independent, expert centralized help with practice administration (including HR, billing, and compliance) vs. localized control and hands-on administration, becoming more corporate vs. remaining autonomous, etc. In some existing well run large practices, the differences in day-to-day practice management may not seem too different after joining PE; however, in others, the lack of autonomy may be significantly noticeable. For instance, clinical decision making typically remains at the physician level, but within a large group PE group, there may be physician committees which recommend preferred practice patterns or clinical pathways, whereas solo doctors may be accustomed to making all decisions themselves.

One noticeable change is the type of job opportunities new fellows will have. There are fewer large independent private practices, as PE backed groups grow. Academic based options are relatively unchanged, and for the entrepreneur, hanging a shingle is still an option. Joining a PE backed group has advantages and disadvantages, which will be discussed, but this segment of the job market is unlike to go away because the corporatization of the practice of retina has made it more efficient in certain ways. However, there will always be a role for the independent physician as well.

4:35 – 4:55 PM

Autoimmune Retinopathy: Challenges in Diagnosis and Treatment

LUCIA SOBRIN, MD, MPH

Autoimmune retinopathies, including paraneoplastic retinopathies, are often challenging to diagnose and treat. This talk will cover the approach to diagnosing autoimmune retinopathy including the imaging and lab work required to rule out other mimicking entities, the pitfalls to avoid when interpreting antiretinal antibody results, and the importance of genetic testing for inherited retinal disorders. Cases will be shown to illustrate the optimal approach to accurately making this diagnosis. The options for treatment, including the evidence supporting their efficacy, will be reviewed. The importance of checking for underlying malignancy and the consideration of unmasking subclinical malignancy with treatment will also be covered.

5:10 – 5:30 PM

Macular Surgery Rounds

DAVID R. CHOW, MD

A variety of challenging and difficult macular surgery cases will be presented with unique surgical treatment strategies.

6:15 – 6:35 PM

Reframing Mindsets in Ocular Cancer and Vision Loss

TARA A. McCANNEL, MD, PhD

The emerging evidence linking psychological mindset to physiological changes that are relevant to health, adaptation, and disease will be discussed. This lecture examines how our thoughts and emotional responses influence neuroendocrine, immune, and inflammatory pathways, and how intentional shifts in mindset may lead to measurable physiological change. Despite major advances in the diagnosis and treatment of ocular cancer, vision loss, and metastatic disease, many determinants of disease progression are still incompletely understood – because we do not know, we lack solutions. This talk highlights how clinicians might consider encouraging patients to reframe their personal illness-related narratives – whether facing partial vision loss or life-threatening cancer – such that these experiences are not viewed as catastrophic. Improving psychological resilience and quality of life may not only improve the patient experience and quality of life, but also hold the potential to influence cancer-associated morbidity and mortality.

6:50 – 7:30 PM

PANEL 3:

Surgical Retina: Trauma, Uveitis, and Visualization

MODERATOR:
R.V. PAUL CHAN, MD, MBA, MSC

PANELISTS:
ROBERT L. AVERY, MD
DAVID R. CHOW, MD
TARA A. McCANNEL, MD, PhD
LUCIA SOBRIN, MD, MPH

This panel will explore major surgical themes in vitreoretinal surgery with an expert panel focusing on trauma, uveitis, ocular oncology, and the use of new imaging technology. Surgical retina continues to advance with the advent of new vitrectomy platforms and surgical visualization techniques. Case presentations will be used to feature important surgical entities such as intraocular tumors and inflammation, retinal detachment, proliferative vitreoretinopathy, diabetic traction detachment, and others. The interactive discussion will include how to approach the decision for surgery, the pros and cons of various treatment options, expected outcomes and areas for future research, and the management of surgical complications.

The Aspen Retinal Detachment Society gratefully acknowledges the following industry partners:

DIAMOND

Alcon

GOLD

AbbVie
Adverum Biotechnologies
Astellas
Bausch + Lomb
EyePoint, Inc.
Harrow, Inc.
Merck & Co., Inc.
Neurotech Pharmaceuticals, Inc.
Regeneron Pharmaceuticals, Inc.

SILVER

4DMT
ANI Pharmaceuticals, Inc.
Annexon Biosciences
Apellis Pharmaceuticals
Corza Medical
Genentech, Inc.
Lumibird Medical
Mallinckrodt Pharmaceuticals
MedOne Surgical, Inc.
Ocular Therapeutix
OCULUS Surgical, Inc.
REGENXBIO, Inc.
Samsara Vision
Vortex Surgical, Inc.
ZEISS

mcpi MEDICAL CONFERENCE PLANNERS INTERNATIONAL

ards@medconfs.com
medconfs.com • aspenretina.com