

Pocket Guide

ARVO
2023
April 23 – 27
New Orleans, La.

The Beauty of Diversity in Science and Nature



ARVO
The Association for Research
in Vision and Ophthalmology

[ARVO.org/AM](https://www.arvo.org/AM)



VERSATILE, INNOVATIVE PLATFORM FOR OCULAR DRUG DELIVERY

Our VitalDose® technology is a drug delivery platform providing controlled release through implant and insert dosage forms. The VitalDose® platform has proven biocompatibility and achieves >6 months release of **mAbs, peptides, RNA, small molecules, and fixed dose combination therapies**. We partner with you to enable innovation within your desired delivery profile.

The Celanese Pharma Lab offers the following support:

- Material selection
- Drug release testing
- Formulation and R&D prototype development
- Tech transfer

Collaborate with us

Email: Healthcare@Celanese.com

Website: healthcare.celanese.com



Celanese®, registered C-ball design and all other trademarks identified herein with ©, TM, SM unless noted, are trademarks of Celanese or its affiliates.
© 2022 Celanese or its affiliates. All rights reserved.

Program Overview

Sun., April 23	Room	Time
Registration/Badge Pickup	Lobby B	7am–6pm
ARVO Central	Exhibit Hall	7am–6:45pm
Posters	See Mobile App/Meeting Planner	8–9:45am
Symposia	See Mobile App/Meeting Planner	8–10am
Exhibits	Exhibit Hall	8:30am–5pm
Opening Keynote Session	Great Hall AD	10:15–11:45am
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	12–1:45pm
ARVO/NEI DEI Discussion	Great Hall AD	2–3:30pm
Low Vision Group	R06	3:45–5:30pm
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	3:45–5:30pm
All Posters	See Mobile App/Meeting Planner	5:45–6:45pm
ARVO Social*	Fillmore	7:30–10:30pm
Mon., April 24		
Registration/Badge Pickup	Lobby B	7am–6pm
ARVO Central	Exhibit Hall	7am–6:15pm
NAEVR Briefing	Rivergate Room	7–8:30am
Exhibits	Exhibit Hall	8:30am–5pm
Proctor Award Lecture	Great Hall AD	8:45–9:30am
Friedenwald Award Lecture	Great Hall AD	9:30–10:15am
Section Business Meetings	See Mobile App/Meeting Planner	10:30–11:15am
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	11:30am–1:15pm
Genetics Group	R09	3:15–5pm
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	3:15–5pm
All Posters	See Mobile App/Meeting Planner	5:15–6:15pm
Student-Trainee Social	Mosaic Lounge	6:30–8pm
Tues., April 25		
Breakfast with the Experts*	208–210	7–8:30am
Registration/Badge Pickup	Lobby B	7am–6pm
ARVO Central	Exhibit Hall	7am–6:30pm
Exhibits	Exhibit Hall	8:30am–5pm
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	8:45–10:30am
General Business Meeting	Rivergate Room	10:45–11:30am
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	11:45am–1:30pm
WEAVR Luncheon*	Great Hall BC	1:45–3:15pm
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	3:30–5:15pm
All Posters	See Mobile App/Meeting Planner	5:30–6:30pm
ARVO/Champalimaud Lecture	Great Hall AD	6:30–7:30pm
Wed., April 26		
Registration/Badge Pickup	Lobby B	7am–6pm
ARVO Central	Exhibit Hall	7am–5:15pm
Exhibits	Exhibit Hall	8:30am–5pm
Weisenfeld Award Lecture	Great Hall AD	8:45–9:30am
Cogan Award Lecture	Great Hall AD	9:30–10:15am
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	10:30am–12:15pm
NEI Director's Session	Great Hall BC	12:30–2pm
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	2:15–4pm
All Posters	See Mobile App/Meeting Planner	4:15–5:15pm
MIT Poster Competition	Mosaic Lounge	5:30–7pm
ARVO Karaoke*	Republic NOLA	9pm–Midnight
Thurs., April 27		
Registration/Badge Pickup	Lobby B	7am–2:30pm
ARVO Central	Exhibit Hall	7am–4pm
Posters	See Mobile App/Meeting Planner	8am–9:45pm
Symposia	See Mobile App/Meeting Planner	8–10am
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	10:30am–12:15pm
Papers/Posters/Minisymposia	See Mobile App/Meeting Planner	12:45am–2:30pm
All Posters/Seattle 2024 Kickoff	Exhibit Hall	2:45–3:45pm
Closing Keynote Session	Great Hall AD	4–5:15pm

* Ticket Required

Complete meeting information is available at [ARVO.org/AM](https://arvo.org/AM)

Table of Contents

Convention Center Maps.....	4
ARVO Policies.....	8
Presenter Guidelines.....	10
How to Connect.....	10
Safety/Security Tips.....	12

Services

Cash at the Meeting.....	14
Concessions/Food Services.....	14
New Orleans Information, Tours and Restaurants.....	14
Disabilities or Special Needs.....	14
First Aid.....	14
Coat and Bag Check.....	14
Lost and Found.....	15
Mother's Lounge.....	15
Prayer and Meditation Room.....	15
Recycling.....	15
Security Services.....	15
Water Bottles/Fountains.....	15
Concessions.....	16
Headshot Lounge.....	17
WEAVR Mentoring.....	17

Meeting Information

Meeting Management Office.....	18
Badge Printing.....	18
Badge Printing Hours.....	18
Speaker Ready Room.....	19
Press Activities.....	19
ARVO Fellows.....	19
Travel Grant Recipients.....	19

Awards and Awards Lectures

ARVO/Alcon Keynote Series.....	20
Distinguished Service Awards.....	22
Proctor Award and Lecture.....	23
Friedenwald Award and Lecture.....	23
Weisenfeld Award and Lecture.....	23
Cogan Award and Lecture.....	23
Joanne G. Angle Award.....	24
Champalimaud Award Lecture.....	24

Daily Program Schedules

Sunday.....	25
Monday.....	29
Tuesday.....	33
Wednesday.....	38
Thursday.....	42
NAEVR Events.....	43
ARVO Social Events.....	45
Special Interest Groups.....	46
Upcoming conferences and workshops.....	46

Exhibits

Exhibit Hall Hours	47
Exhibit Hall Floor Plan	48
Exhibits A-Z	50
Exhibitor Presentations.....	72
Fellows Class of 2023.....	73
Dowling Society Members	74
Legacy Society Members	76
Shuttle Service: Hotels – Convention Center	77
ARVO 2024 Seattle Hotels	78
ARVO Foundation Matching Gift Campaign	79
Travel Grant Supporters.....	80



The Association for Research in Vision and Ophthalmology
5515 Security Lane, Suite 500 | Rockville, MD 20852-5034

Tel: +1.240.221.2900 | arvo@arvo.org | ARVO.org

Disclaimer

The Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting online program materials and print publications aim to promote vision research and scientific discourse for educational purposes. ARVO accepts no responsibility for any products, presentations, opinions, statements or positions expressed, and inclusion of such material within the Meeting, the publications or posted online does not constitute endorsement by ARVO.

Photography Release

By attending the ARVO Annual Meeting, attendees agree to allow their names, likenesses and images either in audio, photographic or video format recorded onsite to be used by ARVO and the ARVO Foundation for Eye Research for educational and promotional purposes.

© 2023 by the Association for Research in Vision and Ophthalmology, Inc. All rights reserved. Permission to republish any part of this book must be obtained in writing from the ARVO's Chief Marketing and Communications Officer prior to publication. Contact Julene Joy at jjoy@arvo.org.

Continuing Medical Education



The ARVO 2023 Annual Meeting, held in New Orleans, La., April 23 – 27, is an accredited continuing education activity. Clinicians who register for CME credits and pay the processing fee are eligible to claim credit for attending in-person accredited paper and cross-sectional group sessions, minisymposia and symposia.

Physician Accreditation Statement

The Association for Research in Vision and Ophthalmology (ARVO) is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Physician Credit Designation

ARVO designates this live activity for a maximum of **19.25 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The full program details are available at [ARVO.org/CMEinfo](https://www.arvo.org/CMEinfo)

Convention Center First Floor

- B2B
- ARVO Foundation Gala
- ARVO/Alcon Keynote Series
- NE/DEI Session
- Award Lectures
- WEAVR Luncheon

Exhibit Hall
Food Court

THE GREAT HALL

HALL B
Exhibits and
Posters

Hall Entrance

THE GREAT HALL PRE-FUNCTION

LOBBY

JULIA STREET

ROCKE ROOM

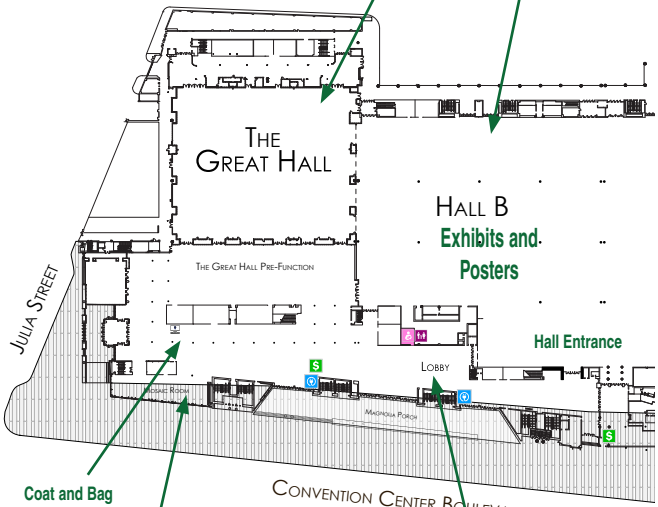
MACDONALD PORCH

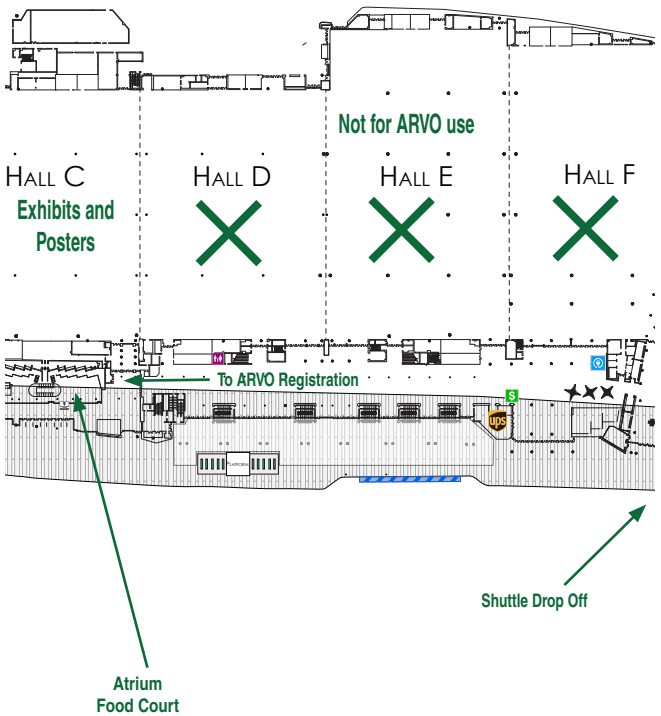
CONVENTION CENTER BOULEVARD

Coat and Bag
Check

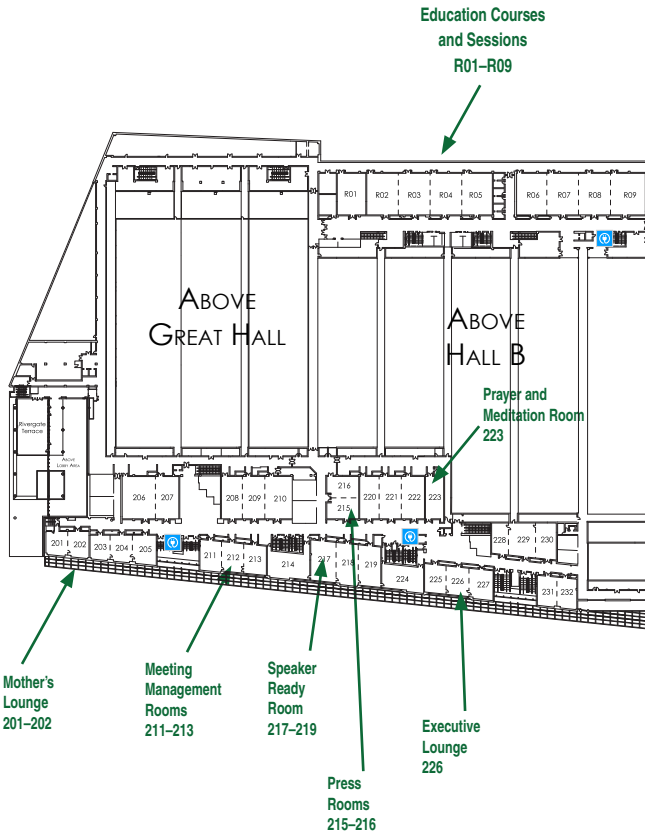
MIT Lounge
Student-Trainee
Social

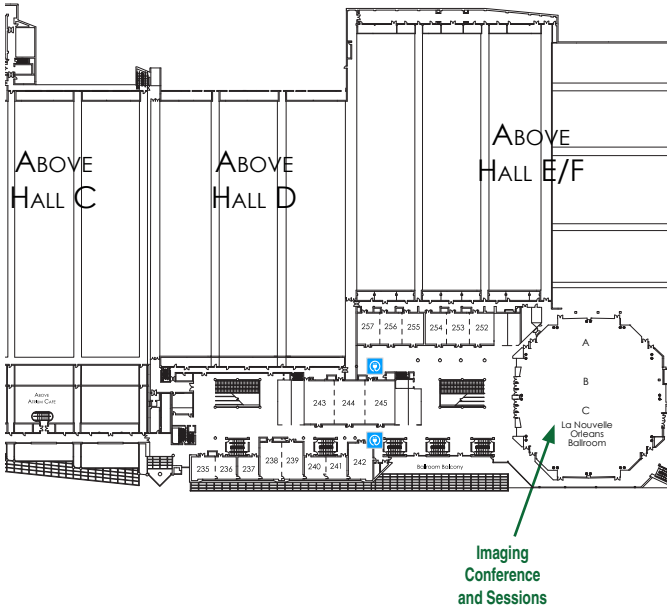
Badge Printing
Registration



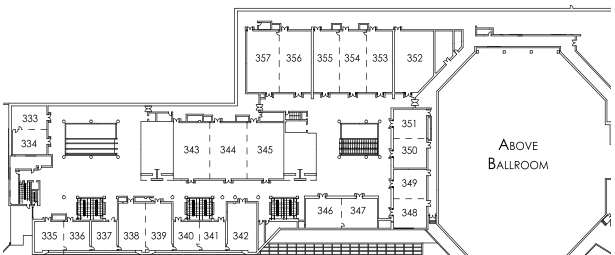


Convention Center Second Floor





Convention Center Third Floor (Above Halls D–F)



Recording/Photography/Audiotape/Video Equipment

Policy — Recording by any means including, but not limited to photographing, audiotaping, videotaping, screen capturing, and/or screen recording of any presentations or sessions — whether virtual or in person — at or during the Annual Meeting is strictly prohibited. Exceptions include recording by an ARVO-authorized agent for official purposes or by First Authors who wish to capture their own presentations. Violators risk confiscation of their equipment and/or dismissal/banning from the Meeting as deemed appropriate by ARVO.

Anti-harassment Policy — While attending the ARVO Annual Meeting, members, non-member participants and invited guests are entitled to a harassment-free environment as they exchange research and engage in any ARVO activity. For detailed information on ARVO's Anti-Harassment Policy, visit **ARVO.org/Policies**.

If you wish to report a possible violation, go to the Meeting Management Office, Room 211–213. ARVO staff will follow the established procedures to address complaints

Commercial Relationships Policy — Presenters must state and display all applicable commercial relationships. For more information on this important policy, see the Commercial Relationships Policy at **ARVO.org/Commercial**.

Clinical Trials Registration Policy— All clinical trials that will be reported in ARVO Annual Meeting abstracts must be registered on a publicly available database. The required acknowledgement of the First Author, acting as the authorized agent for all authors, certifies that any research presented in the abstract that reports on a clinical trial is registered, and the registration location and number is included on the abstract, in compliance with the ARVO Statement on Registering Clinical Trials, arvo.org/Clinical-Trials. For more information on this policy, refer to the Clinical Trials Registration Statement at **ARVO.org/Clinical-Trials**.

Children in the convention center — Children under 18 who are not scientific attendees are permitted at the meeting without registration when accompanied by a parent. Please do not leave your children unattended. Children may attend sessions unless they are disruptive. Children are not permitted in ticketed events without a ticket and are not allowed on the exhibit/poster hall floor on setup days.



ZEISS

Seeing beyond

Ophthalmic innovation in sight.

Advancing technology
through collaboration.



Where collaboration thrives, innovation emerges.

Visit ZEISS at Booth #1109

ZEISS is accelerating ophthalmic care with insightful research, innovative advancement, and novel collaborations. Discover the transformative technologies used by leading retina and glaucoma clinicians and researchers worldwide at ARVO. Spend some time at booth #1109 to see first-hand how AI, integrated workplaces, global collaboration, and more are shaping the eye care clinic of tomorrow.

Featured booth activities:

- Meet our scientists
- Hear from clinical experts
- Tour our technologies
- Test your knowledge with a game of “Jeopard-eye”



Presenters

All speakers are required to check into the Speaker Ready Room, Room 217–219, preferably 24 hours, but no later than four hours, before their presentations.

Previously uploaded presentations must be reviewed and approved.

All presentation slides and other files must be uploaded in advance of your presentation. Speaker Ready Room audiovisual (AV) technicians will upload files and screen them for compatibility. Presenters will not be allowed to load PowerPoint slides or other files directly to the computer in the session room.

Personal laptops cannot be used for presentations in the session rooms. Do not bring your laptop or other media devices to the session.

If you are unavoidably delayed, you must still go directly to the Speaker Ready Room.

Speaker Ready Room — Room 217–219

- | | |
|--------------------|------------|
| ■ Fri., April 21 | 6–8pm |
| ■ Sat., April 22 | 7am–7pm |
| ■ Sun., April 23 | 7am–6pm |
| ■ Mon., April 24 | 7am–6pm |
| ■ Tues., April 25 | 7am–6pm |
| ■ Wed., April 26 | 7am–6pm |
| ■ Thurs., April 27 | 7am–2:30pm |

For details, see ARVO.org/Presenters.

How to Connect

Wireless Internet — Complimentary internet access is available throughout the convention center. To access the internet, open your device Wi-Fi and select network name: ARVO. There is no password.



Come See What's Possible

Visit us at
Booth 1001

Poster Presenters

- Exhibit Hall will be open starting at 7am for poster presenters to hang their poster on the day of their presentation.
- All posters must be placed by 8am on the day of presentation and remain on display the entire day.
- Posters may not be displayed prior to the day of presentation.
- Presenters must be present at their posterboards during their scheduled presentation time on the day of their scheduled presentation and at the end-of-day All Posters session.
- Sunday poster presenters are strongly encouraged to register and print their badges on Saturday.
- Posters must be removed 15 minutes following the All Posters session each day. ARVO is not responsible for poster materials left at the end of day. Posters remaining on the posterboards will be removed and discarded.

For details, see [ARVO.org/Presenters](https://www.arvo.org/Presenters).

Safety/Security Tips

- Carry with you the name, address, phone numbers and email of an individual to contact in case of emergency. If you have a mobile phone, enter the emergency contact phone number in your contacts list under the heading “ICE” (In Case of Emergency).
- Be sure to carry a card describing any medical conditions or allergies you may have, or wear a medical alert tag.
- Do not wear your Meeting name badge out and about in New Orleans.
- Avoid unlit streets and always walk with another person when sightseeing or shopping, particularly at night.
- Do not display large amounts of cash when paying for taxis or other purchases.
- Do not leave unsecured valuables in your hotel room; lock them in your in-room safe. Hotels are not responsible for items left in your room.
- At the meeting, check items at the coat and bag check area in Lobby A of the convention center.



**BrightFocus®
Foundation**

Cure in Mind. Cure in Sight.

CELEBRATING
50
YEARS

ARVO congratulates BrightFocus Foundation on its 50th anniversary!



BrightFocus Foundation is a premier nonprofit funder of research to defeat Alzheimer's, macular degeneration, and glaucoma. We are proud to have funded **\$93 million** in vision research and **2,620** investigators since inception.

Will you be next? Macular Degeneration Research and National Glaucoma Research grant applications open soon!



Learn more at
brightfocus.org/apply.

Visit us at Booth #1318

Cash at the Meeting

ARVO 2023 is a cashless meeting; however, concession vendors will accept cash.

Concessions/Food Service

Food service is available in the convention center Sunday through Wednesday. See pg. 16 for a listing of convention center concessions.

New Orleans Information, Tours and Restaurants

There is a concierge desk staffed by On the Town. They will provide information about local attractions, shopping, local transportation, tours and restaurants.

Disabilities or Special Needs

The Ernest N. Morial Convention Center is accessible to the disabled. For assistance, including scooter needs, go to the Meeting Management Office, Room 211–213.

First Aid

The First Aid office is located in main lobby concourse and will be available during Meeting hours. You may also stop by the Meeting Management Office, Room 211–213.

Coat and Bag Check

Complimentary coat and bag check will be available in Lobby A.

Hours:

- | | |
|--------------------|------------|
| ■ Sat., April 22 | 7am–11pm |
| ■ Sun., April 23 | 7am–7:30pm |
| ■ Mon., April 24 | 7am–8:30pm |
| ■ Tues., April 25 | 6am–8pm |
| ■ Wed., April 26 | 7am–7:30pm |
| ■ Thurs., April 27 | 7am–6pm |

ARVO is not responsible for items left at the end of the Meeting.

Sponsored by: **Genentech**
A Member of the Roche Group

Lost and Found

All lost items are taken to the Meeting Management Office, Room 211–213. Please stop by this office to see if your item has been found.

Mother's Lounge

Please see staff in Meeting Management, Room 211–213, for access to the Mother's Lounge, Room 201–202.

Prayer and Meditation Room

The Prayer and Meditation Room is 223. Contact the Meeting Management Office, Room 211–213, if you have questions.

Recycling

Recycling and compost bins are located throughout the convention center. Help ARVO in our efforts to be environmentally friendly and put your trash in the appropriate receptacle.

Security Services

If you need assistance while at the convention center, contact the Information Desk in ARVO Central in the Exhibit/Poster Hall or Meeting Management in Room 211–213.

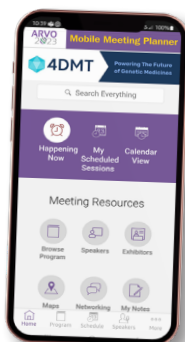
Water Bottles/Fountains

Water fountains and bottle-filling stations are located throughout the Ernest N. Morial Convention Center.

**Download the ARVO
Annual Meeting mobile app**
Visit your app store and search
for ARVO 2023

Use the mobile app to:

- Build your daily schedule
- Find a speaker, session or poster
- Take notes on a session or poster
- View the Convention Center Map
- Find an exhibitor



Sponsored by:  **4DMT**

Concessions

The Ernest N. Morial Convention Center offers several food service options. All concessions take Mastercard, VISA, and American Express.

Atrium

Twain's Deli

- Sat., April 22 10am–3pm
- Sun., April 23 –
Wed. April 26 6:30am–3pm
- Thurs., April 27 6:30am–2pm

Coffee Shop

- Sat., April 22 7am–2pm
- Sun., April 23 –
Wed. April 26 6:30am–4pm
- Thurs., April 27 6:30am–2pm

Atrium Café

Full-service coffee, breakfast bites, soups, salads, and NOLA favorites

- Sun., April 23 –
Wed. April 26 10am–3pm
- Thurs., April 27 10am–2pm

Maui Wowi

Coffees and smoothies

- Sun., April 23 –
Wed. April 26 6:30am–3pm
- Thurs., April 27 6:30am–2pm

Exhibit Hall

Espresso Cart

Networking Lounge C

- Sun., April 23 –
Wed., April 26 8am–5pm

Coffee Truck

Networking Lounge B

- Sun., April 23 –
Wed., April 26 8am–5pm

Exhibit Hall Food Court

Grab n go Espresso Cart

- Sun., April 23 –
Wed., April 26 8am–6pm

Burger Shack

- Sun., April 23 –
Wed., April 26 10am–5pm

Korean Bowl

- Sun., April 23 –
Wed., April 26 10am–5pm

NOLA Wok

- Sun., April 23 –
Wed., April 26 10am–5pm

Pita Hut Mediterranean

- Sun., April 23 –
Wed., April 26 10am–5pm

Southwest Bowl

- Sun., April 23 –
Wed., April 26 10am–5pm

Lobby A

Morning Fuel

- Sun., April 23 –
Thurs., April 27 6:30am–4pm

La Nouvelle Foyer (2nd Level)

Espresso Cart

- Sun., April 23 –
Wed. April 26 6:30am–3pm

2023 Annual Meeting Survey

We want to hear from you! Following the Annual Meeting, all attendees will receive a link to the Annual Meeting Survey. Please take a few minutes to respond and send us your thoughts about how ARVO can continue to improve the Annual Meeting. We appreciate your attendance and look forward to receiving your comments.

Headshot Lounge

Get a free professional headshot taken in Booth 1548 in the Exhibit Hall.

Hours:

Sunday – Tuesday: 8:30am–12pm, 1–4:30pm

Wednesday: 8:30am–12pm

Walk-up only, no appointment necessary. Hair and makeup will not be provided.



Drop-In Mentoring

Looking for career guidance from a female perspective?

Mid- and senior-level ARVO members provide 15–30 minute mentoring sessions during ARVO 2023.

Meet with a mentor at ARVO Central in the Exhibit Hall, **Sun., April 23 – Wed., April 26, 12–3pm each day.**

No appointment necessary.



ARVO Foundation
for Eye Research®

Women in Eye and Vision Research

WEAVR

Meeting Management Office

Staff will be available in Room 211–213 throughout the week to assist with Meeting services.

Hours:

- Sat., April 22 7am–7pm
- Sun., April 23 7am–6:30pm
- Mon. April 24 7am–7pm
- Tues., April 25 7am–6:30pm
- Wed., April 26 7am–6:30pm
- Thurs., April 27 7am–5pm

Badge Printing

ARVO 2023 badge printing will be in Lobby B of the Ernest N. Morial Convention Center. Lobby B includes:

- **Badge printing** – Bring your email confirmation with the QR code to an ExpressPass badge printing kiosk. Simply scan the QR code and receive your badges and/or tickets. QR codes can also be used from your smartphone.
- **Press Badge Pickup** – Pre-registered press can simply key in their name and print their badges at a badge printing kiosk.
- **Name Badge Replacement** – Replace a lost or forgotten name badge at the Attendee Help Desk for a \$50 fee. Corrections to the badges are free.
- **Exhibitor Badge Pickup** – All pre-registered exhibitors should print their confirmation and bring it with them to the convention center. Simply scan the QR code at the Exhibitor desk.

Badge Printing Hours

Sunday presenters are strongly encouraged to print their badges on Saturday.

- Fri., April 21 6–8pm
- Sat., April 22 7am–7pm
- Sun., April 23 7am–6pm
- Mon., April 24 7am–6pm
- Tues., April 25 7am–6pm
- Wed., April 26 7am–6pm
- Thurs., April 27 7am–2:30pm

Speaker Ready Room — Room 217–219

All speakers are required to check into the Speaker Ready Room at least four hours in advance of their presentation.

- Fri., April 21 6–8pm
- Sat., April 22 7am–7pm
- Sun., April 23 7am–6pm
- Mon., April 24 7am–6pm
- Tues., April 25 7am–6pm
- Wed., April 26 7am–6pm
- Thurs., April 27 7am–2:30pm

For details, see [ARVO.org/Presenters](https://arvo.org/Presenters).

Press Activities

ARVO invites members of the press to cover paper and poster sessions at the Meeting. Pre-registered press can simply key in their names and print their badges at a badge printing kiosk. Please note that research presented at the Meeting may be proprietary or submitted for publication.

The Press Room is Room 215–216, with some space available for interviews. Please inquire in the Press Room.

ARVO Fellows

ARVO Fellows in the Class of 2023 may pick up their materials at the Executive Lounge, Room 226 of the convention center, during Badge Printing hours. Ribbons for prior year Fellows will also be available.

Travel Grant Recipients

Pick up your Travel Grant packet which includes your ribbon and reimbursement form at the Information Desk in Lobby B of the convention center on Saturday. Packets will be available at ARVO Central during the rest of the meeting.

Need Gifts?
Visit ARVO Central,
Exhibit Hall



ARVO/Alcon Keynote Series

Opening Keynote

Sun., April 23 | 10:15–11:30am | Great Hall AD

Emerging imaging technologies to study subcellular architecture, dynamics and function



Jennifer Lippincott-Schwartz, PhD
Senior Group Leader
Howard Hughes Medical Institute
Janelia Research Campus

Closing Keynote

Thurs., April 27 | 4–5:15pm | Great Hall AD

The beauty of sensory diversity



Ivan R. Schwab, MD, FACS
Professor Emeritus of
Ophthalmology
University of California, Davis

The ARVO/Alcon Keynote Series is sponsored by the ARVO Foundation through a generous grant from Alcon Laboratories.



**VISIT THE JANSSEN
MEDICAL AFFAIRS
BOOTH #709 AT ARVO!**

OUR VISION

Every day we
dare to envision
a brighter future

We stand by patients with courageous science to match their will. With relentless ingenuity, we aim to achieve extraordinary discoveries including gene therapy innovations. We won't stop striving until we restore and preserve vision for those living with retinal diseases.

www.retina.janssen.com

janssen 

PHARMACEUTICAL COMPANIES OF
Johnson & Johnson

ARVO Distinguished Service Awards

Distinguished Service Award recipients will be recognized at the General Business Meeting, Tues, April 25, 10:45–11:30am, Rivergate Room.



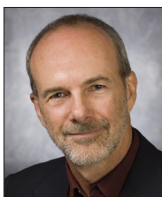
Maureen G. Maguire, PhD, FARVO
University of Pennsylvania
Immediate Past President
Trustee, CL Section (2017 – 2022)



Louis R. Pasquale, MD, FARVO
Mount Sinai Health
Vice President, GL Section
(2018 – 2023)



Donald Hood, PhD, FARVO
Columbia University
Editor-in-Chief, *IOVS*
(2018 – 2022)



Andrew "Beau" Watson, OD, PhD
Apple, Inc.
Editor-in-Chief, *Journal of Vision*
(2018 – 2022)



Marco Zarbin, MD, PhD, FARVO
Rutgers–New Jersey Medical School
Founding Editor-in-Chief, *TVST*
(2012 – 2022)



Proctor Award and Lecture

Mon., April 24, 8:45–9:30am
Great Hall AD

Ophthalmology at the forefront of precision medicine: From genes to therapies for inherited retinal degenerations

Eric A. Pierce, MD, PhD, FARVO



Friedenwald Award and Lecture

Mon., April 24, 9:30–10:15am
Great Hall AD

The diabetic retinopathy “pandemic” and evolving global strategies

Tien Y. Wong, MBBS, PhD, FARVO



Weisenfeld Award and Lecture

Wed., April 26, 8:45–9:30am
Great Hall AD

Iliad and Odyssey: A journey weaving and unweaving the axon

Leonard Levin, MD, PhD, FARVO



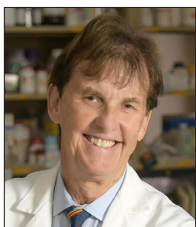
Cogan Award and Lecture

Wed., April 26, 9:30–10:15am
Great Hall AD

Treating inherited retinal degenerative blindness

Budd Tucker, PhD

Joanne G. Angle Award



Nick Delamere, PhD,
FARVO

The Joanne G. Angle Award is the highest service honor to a volunteer professional bestowed by ARVO. This year the award is being presented to Nicholas Delamere, PhD, FARVO.

Delamere is a professor in the Department of Physiology at the University of Arizona in Tucson. He developed a connection with ARVO from the time he attended his first

Annual Meeting as a postdoc in May 1977. An editor of *Investigative Ophthalmology & Visual Science* since 1998, he has served on several ARVO committees over the years, eventually becoming president of the Association in 2009.

“Being recognized in this way is incredibly touching because Joanne Angle was a very dear friend,” says Delamere. “It will be an honor to accept the award and be with everyone when we gather in New Orleans.”

Delamere will be recognized at the General Business Meeting Tues, April 25, 10:45–11:30am, Rivergate Room.

The Champalimaud Award Lecture

Tues., April 25 | 6:30–7:30pm | Great Hall AD

The António Champalimaud Vision Award is presented to active research groups involved in basic or clinical research which has led to a major breakthrough in the understanding and/or the preservation of vision.

The 2022 awards were presented to **Gerrit Melles** (The Netherlands) and **Claes Dohlman** (Sweden) for their groundbreaking research and treatment of corneal diseases, resulting in the restoration of vision for millions of people.

Attend the award lecture to hear Melles and Dohlman present on their revolutionary research and treatment of corneal diseases.



Sun. April 23 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
8–10am	Mechanisms behind Myopia control treatments [VI] — Symposia		La Nouvelle C
	Functional retinal imaging: Optoretinography (ORG) and beyond [MOI] — Symposia	*	La Nouvelle AB
	Cell death in ocular health and disease: Mechanisms and emerging therapeutics [IM] — Symposia		Great Hall BC
10:15– 11:30am	Emerging imaging technologies to study subcellular architecture, dynamics and function — Opening Keynote		Great Hall AD
12–1:45pm	Cellular and genetic diversity in the retinas of human and non-human primates [VN] — Minisymposia	*	244
	Image based machine learning for classification [MOI]	*	356-357
	Retinal Diseases [CL]	*	345
	Amblyopia [EY]	*	344
	Lens cell development and differentiation [LE]	*	343
	Corneal Immunology [CO]	*	252-254
	Corneal Stroma: Keratocytes, wound repair, healing [CO]	*	243
	Molecular Events in Diabetic Retinopathy [BI]	*	R07-R08
	High-dimensional Data Types to Big Data in Ocular Gene Discovery and Translation [GEN]	*	R06
	Neurodegeneration [GL]		R04-R05
	Inherited retinal degeneration: From diagnosis to treatment [RC]	*	R02-R03
	Functional imaging and optoretinography [VI]	*	La Nouvelle C
	AMD antiVEGF [RE]		La Nouvelle AB
	Posterior segment Imaging (non-AMD) [RE]	*	Great Hall BC

Sun., April 23 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
2–3:30pm	Representation Matters: The Value of DEIA in Vision Research		Great Hall AD
3:45–5:30pm	Novel models and approaches for cell replacement in retinal degeneration [RC] — Minisymposia	*	La Nouvelle C
	Low Vision Group: Challenges in intervention effectiveness research [LV]	*	R06
	Consequences of altered cell metabolism and/or mitochondrial functionality during ocular health and disease [IM] — Minisymposia	*	R07-R08
	Retinal Potpourri [RE]	*	353-355
	Glaucoma Data Science [GL]		255-257
	Corneal epithelium [CO]	*	244
	Corneal Neuropathy and Ocular Pain [CO]	*	243
	Myopia: Mechanism of Emmetropization and Eye Growth [AP]	*	R09
	Animal Models of Ophthalmic Disease [GL]		R04-R05
	Diabetic Retinopathy Novel Mechanisms [RC]	*	R02-R03
	AMD: New drugs, delivery systems and mechanisms of action 1 [PH]		R01
	AMD Imaging [RE]	*	La Nouvelle AB

Sun., April 23 ■ Posters

Time	Session Title	Board #
8–9:45am	Retinal ganglion cells, visual circuits and behavior [VN]	B0083-B0111
	Glaucoma: molecular, biochemical and biomechanical mechanisms [BI]	B0112-B0146
	Glaucoma Epidemiology [CL]	B0147-B0201
	Pathobiology of Microbial Infections [IM]	B0202-B0225
	Lacrimal gland and meibomian gland [CO]	B0305-B0322
	Tear film [CO]	B0323-B0338
	Ocular Surface health/disease and microbiome [CO]	B0386-B0399
	AI in the retina, photos and other [RE]	C0049-C0110
	AI in the retina using OCTA [RE]	C0111-C0140
	AI in retina using OCT [RE]	C0141-C0171
	Glaucoma Data Science [GL]	C0226-C0286
	Honing in on phenotypes and treatments using genomic technologies [GEN]	C0328-C0346
	Molecular and Biochemical Mechanisms of Ocular Disease [BI]	C0406-C0422
	Cataract surgery: outcomes and epidemiology [LE]	C0544-C0564
12–1:45pm	Diabetic Retinopathy (clinical studies) [RC]	B0001-B0011
	Retinopathy – novel mechanisms and treatment approaches [RC]	B0032-B0061
	Antimicrobial Resistance: Epidemiology, Antimicrobials and Diagnostics [IM]	B0226-B0252
	Corneal Endothelium 2 [CO]	B0253-B0272
	Corneal Endothelium 1 [CO]	B0273-B0304
	Dry eye [CO]	B0339-B0385
	Corneal Neuropathy and Ocular Pain [CO]	B0400-B0411
	AMD New drugs, delivery systems and mechanisms of action 1 [PH]	C0309-C0327
	Gene therapy and gene editing for ocular disorders [BI]	C0347-C0405
	Myopia Epidemiology and Treatment [CL]	C0488-C0517

Poster board numbers correspond to poster location in the Exhibit Hall.

B = Poster Area B, C = Poster Area C.

Sun., April 23 ■ Posters (continued)

Time	Session Title	Board #
12–1:45pm (continued)	Mechanisms of Refractive Error and Eye Development [AP]	C0518-C0543
	Low vision services and quality of life [LV]	C0600-C0613
	Melanoma [AP]	C0636-C0677
3:45–5:30pm	Diabetic Retinopathy (preclinical studies) [RC]	B0012-B0031
	Neurodegeneration [GL]	B0062-B0082
	Applications of adaptive optics and advanced imaging [VI]	C0001-C0029
	High resolution and functional imaging [MOI]	C0030-C0048
	Machine learning for segmentation and classification [MOI]	C0172-C0225
	AMD New drugs, delivery systems and mechanisms of action 2 [PH]	C0287-C0308
	Anterior Segment and Trauma Epidemiology [CL]	C0423-C0487
	Lens aging and cataractogenesis [LE]	C0565-C0576
	Retinal vasculature [RC]	C0577-C0599
	Retinoblastoma and childhood tumors [AP]	C0614-C0635

Connect with ARVO on your favorite social media site to stay up-to-date on the latest news and information on eye and vision research.



twitter.com/ARVOinfo or include #ARVO2023



facebook.com/ARVOinfo



linkedin.com/company/arvoinfo



arvoconnect.arvo.org

Poster board numbers correspond to poster location in the Exhibit Hall.
B = Poster Area B, C = Poster Area C.

Mon., April 24 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
7–8:30am	NAEVR Defense Briefing		Rivergate Room
8:45–9:30am	Proctor Award and Lecture		Great Hall AD
9:30–10:15am	Friedenwald Award and Lecture		Great Hall AD
10:30–11:15am	Section Business Meetings		Various
11:30am–1:15pm	Mitochondrial optic neuropathies — from disease mechanisms to therapeutic strategies [EY] — Minisymposia	*	344
	Immune response in the anterior segment of the eye – lens, cornea and anterior uveitis [LE] — Minisymposia	*	La Nouvelle C
	Epigenetic landscape in ocular health and disease [BI] — Minisymposia		Great Hall BC
	Functional imaging [MOI]	*	356-357
	Vision Impairment and Quality of Life [CL]	*	345
	Contact lens [CO]		252-254
	Corneal Endothelium [CO]		244
	Protecting the Ocular Surface from Infection [IM]	*	243
	Mechanisms of tumorigenesis – novel experimental approaches and characterization [AP]	*	R09
	Glaucoma Structure and Function Relationships [GL]		R04-R05
	Retinopathy – novel treatment approaches [RC]	*	R02-R03
	AMD: New drugs, delivery systems and mechanisms of action 2 [PH]		R01
	AI in Retina OCTs [RE]	*	La Nouvelle AB
1:30-3pm	US-China Networking Forum		220-222

Mon., April 24 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
3:15-5pm	Genetics Group: Broadening diversity and inclusion in ocular genetics and multi-omics research [GEN]		R09
	Extracellular Vesicles in the Eye: From cellular communicators, to biomarkers and therapeutics (Part I) [GL] — Minisymposia	*	255-257
	High-resolution and wide-field imaging [MOI]		356-357
	Refractive Error/Myopia [CL]		345
	Optic Neuropathies [EY]		344
	Lens homeostasis, pathology, and regeneration [LE]	*	343
	Corneal Immunology and Neovascularization [CO]	*	252-254
	Photoreceptors and Outer Retinal Processing [VN]	*	244
	Innate Immunity in Ocular Health and Disease [IM]	*	243
	Advances in gene therapy and gene editing for ocular diseases 1 [BI]		R07-R08
	Low vision and comorbidity [LV]	*	R06
	Neuroprotection [GL]	*	R04-R05
	Emerging topics in the application of stem cells as a tool for vision research [RC]	*	R02-R03
	Aqueous humor dynamics, and IOP [PH]		R01
	Corneal epithelial wound repair and healing [CO]	*	La Nouvelle C
	AI in Retina Imaging [RE]	*	La Nouvelle AB

Mon., April 24 ■ Posters

Time	Session Title	Board #
11:30am– 1:15pm	Aqueous humor dynamics, trabecular meshwork and ciliary body 1 [GL]	B0001-B0028
	Aqueous humor dynamics, IOP, corneal disease, cytokines and growth factors [PH]	B0029-B0041
	Pediatric Epidemiology [CL]	B0042-B0076
	Amblyopia [EY]	B0077-B0106
	Visual psychophysics [VI]	B0124-B0170
	Inherited Retinal Degeneration [RC]	B0171-B0213
	Neuroregeneration and Neuroprotective Mechanisms [GL]	B0234-B0259
	Neuron/Glia Interactions in the Retina [RC]	B0260-B0282
	Regeneration in Retina and RPE: Regulatory Mechanisms [RC]	B0313-B0336
	Inner and outer retinal circuits [VN]	B0337-B0370
	Keratoconus and Collagen Crosslinking [CO]	B0403-B0418
	Corneal Biomechanics [CO]	B0419-B0441
	Corneal Immunology and Neovascularization [CO]	B0442-B0474
	AMD Epidemiology [CL]	C0001-C0024
	Retinal vascular diseases [RE]	C0220-C0255
	Retinal Laser [RE]	C0256-C0265
	Biochemical and Molecular Mechanisms of Diabetic Retinopathy [BI]	C0300-C0337
	High-dimensional data and methods ocular genomic studies [GEN]	C0402-C0427
	AMD Imaging (intermediate AMD) [RE]	C0085-C0107
	3:15pm–5pm	Walking and driving with low vision [LV]
Neuroprotection, blood flow, ischemia-reperfusion and oxidative stress [PH]		B0214-B0233
Glaucoma Structure and Function Relationships [GL]		B0283-B0312
Immunobiology of Eye Diseases: The Ocular Microenvironment [IM]		B0371-B0402
Posterior Segment Imaging (Non-AMD) [RE]		C0025-C0037

Poster board numbers correspond to poster location in the Exhibit Hall.

B = Poster Area B, C = Poster Area C.

Mon., April 24 ■ Posters (continued)

Time	Session Title	Board #
3:15pm–5pm (continued)	AMD: Cell Biology, Pathology and Pre-Clinical Studies [RC]	C0038-C0084
	AMD Imaging (advanced AMD) [RE]	C0108-C0132
	AMD Clinical Neovascular [RE]	C0133-C0158
	AMD antiVEGF [RE]	C0159-C0204
	AMD Clinical geographic atrophy [RE]	C0205-C0219
	Diabetic Retinopathy [CL]	C0266-C0299
	Biochemical and molecular disease mechanisms of the posterior segment [AP]	C0338-C0362
	Keratitis [CO]	C0363-C0380
	Corneal tissue engineering and regenerative medicine [CO]	C0381-C0401
	Image processing and machine learning [MOI]	C0428-C0463

Meet the Editors

Stop by ARVO Central to meet the editors of two of ARVO's scientific journals

Joseph Carroll, PhD, FARVO
Editor-in-Chief, *Investigative Ophthalmology & Visual Science*



Roy S. Chuck, MD, PhD
Editor-in-Chief, *Translational Vision Science & Technology*



Mon., April 24 **1:30–3pm**
Wed., April 26 **1:30–3pm**

Ask about:

- Journal scope
- Peer review
- Best practices for improving your manuscript
- Causes for rejection
- Anything else you've always wanted to know

Poster board numbers correspond to poster location in the Exhibit Hall.
B = Poster Area B, C = Poster Area C.

Tues., April 25 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
7–8:30am	Breakfast with the Experts		208–210
8:45– 10:30am	Gene-independent therapeutic approaches for treatment of retinal disease [RC] – Minisymposia		La Nouvelle AB
	RPE heterogeneity in health and disease [BI] — Minisymposia	*	R07-R08
	Extracellular Vesicles in the Eye: From cellular communicators, to biomarkers and therapeutics (Part II) [AP] — Minisymposia	*	R09
	Epstein Award Session		255-257
	Emerging Therapeutics to Maintain Corneal Health [CO] — Minisymposia		La Nouvelle C
	Advances in retinal connectomics [VN] — Minisymposia	*	244
	New imaging technologies - intrasurgical and robotically assisted [MOI]	*	356-357
	Retinal detachment [RE]	*	353-355
	Public Health [CL]	*	345
	Visual Development and Pathways [EY]	*	344
	Cataract risk, mechanisms and treatments [LE]		343
	Mechanisms in Uveitis: Immune Cell Recruitment and Activation [IM]	*	243
	Preferred retinal locus and multisensory perception in low vision [LV]	*	R06
	Aqueous humor dynamics, trabecular meshwork and ciliary body 1 [GL]	*	R04-R05
	Targeting mitochondria [RC]	*	R02-R03
	Retina/RPE: New drugs, delivery and mechanisms of action 1 [PH]		R01
10:45– 11:30am	General Business Meeting		Rivergate

Tues., April 25 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
11:45am– 1:30pm	New imaging technology and signal processing [MOI]		356-357
	Vitreoretinal surgery [RE]	*	353-355
	Glaucoma Epidemiology [CL]	*	345
	Neuro-Ophthalmology [EY]	*	344
	Cataract surgery: outcomes, epidemiology and techniques [LE]		343
	Vision assessment and clinical applications [VI]		255-257
	Dry eye (clinical) [CO]		252-254
	Inner Retinal Circuits [VN]	*	244
	Ocular microenvironment in shaping immune response [IM]	*	243
	Myopia: Structural Changes from Retina to Sclera [AP]	*	R09
	Functional exploration of genetic variants in ocular disorders [BI]	*	R07-R08
	Improving visual functioning through advanced technology [LV]		R06
	Neuroregeneration [GL]	*	R04-R05
	Eye Development: Regulatory Mechanisms and Networks [RC]	*	R02-R03
	Retina/RPE: New drugs, delivery and mechanisms of action 2 [PH]		R01
	Corneal Development and Molecular Biology [CO]	*	La Nouvelle C
	Diabetic Macular Edema [RE]		La Nouvelle AB
1:45–3:15pm	15th Annual WEA VR Luncheon		Great Hall BC
3:30–5:15pm	Seeing Diversity through the Human Eyes by Computer Vision [CL] — Minisymposia		243
	Myopia control and refractive error development [VI]	*	255-257
	Keratitis [CO]	*	252-254
	Dry eye (non clinical) [CO]		244

Tues., April 25 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
3:30–5:15pm (continued)	Diagnostic, prognostic, therapeutic implications for ocular tumors [AP]		R09
	Genomic dissection of the eye using 'omics and single cell technology [GEN]	*	R06
	New Ideas in Glaucoma [GL]	*	R04-R05
	Mechanisms of Retinal Vascular Remodeling and Barrier Function [RC]	*	R02-R03
	Neuroprotection and blood flow [PH]	*	R01
	AMD Translational Studies [RE]	*	La Nouvelle C
	Retinal vascular diseases [RE]		La Nouvelle AB
6:30–7:30pm	Champalimaud Vision Award Lecture		Great Hall AD



National Eye Institute

How to successfully navigate the NEI grant application process from pre-submission to post-award

Wed., April 26, 9–11am

Exhibitor Education Lounge, Exhibit Hall

Learn about NEI funding opportunities, what factors are considered when making funding decisions, and responsibilities after an award is made. Program Officers from NEI's Division of Extramural Science Programs and Scientific Review Officers and Grant Specialists from NEI's Division of Extramural Activities will present information about what you need to know during each stage of the application process. Understanding NEI priorities and the NIH grant process is critical for writing competitive grant applications.

Tues., April 25 ■ Posters

Time	Session Title	Board #
8:45– 10:30am	Presbyopia and intraocular lenses [VI]	B0001-B0029
	Flow imaging [MOI]	B0086-B0130
	Neuroprotective Therapies [GL]	B0213-B0230
	Retina/ RPE: New drugs, mechanisms of action and toxicity [PH]	B0304-B0319
	Drug delivery: Iris, ciliary body and posterior segment [PH]	B0320-B0342
	Diabetic Macular Edema Clinical Research [RE]	B0452-B0480
	Diabetic Retinopathy Medical [RE]	B0481-B0517
	Diabetic Macular Edema Anti-VEGF [RE]	B0518-B0535
	AMD translational studies [RE]	C0001-C0029
	AMD Clinical Intermediate AMD [RE]	C0030-C0062
	Ocular pathologies: From genes to genomes in diverse populations [GEN]	C0110-C0134
	Reading and information access [LV]	C0149-C0158
11:45am– 1:30pm	Conjunctiva: cell biology, disease and surgery [CO]	B0367-B0383
	Mediating inflammation [RC]	B0427-B0451
	Retinal pigment epithelium [RC]	C0063-C0109
	Transcriptomics, proteomics, metabolomics and systems biology [BI]	C0135-C0148
	Public Health [CL]	C0159-C0180
	Healthcare Research [CL]	C0181-C0232
	Corneal epithelial wound repair and healing [CO]	C0253-C0289
	Corneal cell and molecular biology [CO]	C0290-C0318
	Stem Cells and Organoids [RC]	C0360-C0398
	Rod and cone physiology [RC]	C0399-C0422
3:30–5:15pm	Cataract surgery: outcomes and techniques [LE]	B0030-B0051
	Retinal Function Testing and Evaluation [RE]	B0052-B0069
	Functional imaging [VI]	B0070-B0085

Poster board numbers correspond to poster location in the Exhibit Hall.

B = Poster Area B, C = Poster Area C.

Tues., April 25 ■ Posters (continued)

Time	Session Title	Board #
3:30–5:15pm (continued)	New development of OCT and OCTA [MOI]	B0131-B0162
	Research in Clinical Imaging for the Anterior Segment, Glaucoma, and Retina [MOI]	B0163-B0212
	Aqueous humor dynamics, trabecular meshwork and ciliary body 2 [GL]	B0231-B0280
	Retina/RPE: Physiology/Pharmacology and Metabolism [PH]	B0281-B0303
	Contact lens [CO]	B0343-B0366
	Advances in Ocular Inflammatory Disease Therapy [IM]	B0384-B0416
	The Role of Microbiome and Environmental Exposures in Ocular Inflammation [IM]	B0417-B0426
	Corneal Epithelium [CO]	C0233-C0252
	Ocular tumors (not melanoma and not RB) – pathogenesis, diagnostic, therapeutics [AP]	C0319-C0336
	Retina Development [RC]	C0337-C0359
	Macular diseases excluding AMD [RE]	C0423-C0460
	Other Retinal Conditions [RE]	C0461-C0528

Future ARVO Annual Meetings

May 5 – 9, 2024

Seattle, Wash.

visitseattle.org

May 2 – 6, 2027

San Diego, Calif.

sandiego.org

May 4 – 8, 2025

Austin, Tex.

austintexas.org

April 30 – May 4, 2028

Toronto, ON, Canada.

destinationtoronto.com

May 3 – 7, 2026

Denver, Colo.

denver.org

Poster board numbers correspond to poster location in the Exhibit Hall.

B = Poster Area B, C = Poster Area C.

Wed., April 26 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
8:45–9:30am	Weisenfeld Award and Lecture		Great Hall AD
9:30– 10:15am	Cogan Award and Lecture		Great Hall AD
10:30am– 12:15pm	Understanding Systemic Disease through Vascular Imaging [VI] — Minisymposia		La Nouvelle C
	New diagnostic techniques and biomarkers [MOI]		356-357
	Retinal prostheses, cell transplantation and gene therapy [RE]	*	353-355
	Pediatric Epidemiology [CL]	*	345
	Crystalline lens and accommodation [VI]	*	255-257
	Corneal tissue engineering and regenerative medicine [CO]		252-254
	Retinal Disease, regeneration, and repair [VN]	*	244
	Microbial Infection and Immunity [IM]	*	243
	Advances in gene therapy and gene editing for ocular disorders 2 [BI]		R07-R08
	Ocular Flow and Biomechanics [GL]	*	R04-R05
	Regulation of lipid metabolism in retinal health and disease [RC]		R02-R03
	Physiology/Pharmacology: Trabecular meshwork and Retina/ RPE [PH]		R01
	Diabetic Retinopathy Medical [RE]	*	La Nouvelle AB
12:30–2pm	NEI Director's Session – What's New at the National Eye Institute in 2023		Great Hall BC
2:15–4pm	OCT angiography clinical applications [MOI]	*	356-357
	Endophthalmitis Clinical [RE]	*	353-355

Wed., April 26 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
2:15–4pm (continued)	Epidemiology of Anterior Segment and Trauma [CL]		345
	Pediatric Ophthalmology [EY]	*	344
	Lens cell biology and biomechanics [LE]	*	343
	Corneal Biomechanics [CO]		252-254
	Retinal Ganglion Cells and Beyond [VN]	*	244
	Antimicrobial and Immunomodulatory Therapeutics [IM]	*	243
	Myopia: Structure-Function Relationship [AP]		R09
	The optic nerve and lamina cribrosa in glaucoma [BI]	*	R07-R08
	Molecular basis of heritable ocular phenotypes [GEN]	*	R06
	Clinical Studies and Clinical Research [GL]		R04-R05
	Glial contributions in the retina [RC]	*	R02-R03
	Advanced imaging methods and clinical applications [VI]	*	La Nouvelle C
AMD Clinical Research [RE]		La Nouvelle AB	
4-5:30pm	NEI Global Health Session		R09

Save the date

ARVO
 2024
 May 5 – 9 | Seattle

Wed., April 26 ■ Posters

Time	Session Title	Board #
10:30am– 12:15pm	Gene and Cell Therapy [RC]	B0121-B0151
	Cellular pathways underlying retinal degeneration [RC]	B0152-B0182
	The Role of Infiltrating Immune Cells in Ocular Disease [IM]	B0183-B0204
	Endophthalmitis Clinical & Intravitreal/periocular local therapies (excluding anti VEGF) [RE]	B0242-B0254
	Dry eye (Clinical) [CO]	B0255-B0311
	Dry Eye and MGD (Clinical) [CO]	B0312-B0331
	Corneal Imaging [CO]	B0332-B0354
	Thyroid eye disease and extraocular muscles [EY]	B0355-B0372
	Orbit and Oculoplastics [EY]	B0373-B0395
	Neuro-Ophthalmology [EY]	B0396-B0447
	Lens cell biology and stress [LE]	C0001-C0014
	Myopia: Clinical Interventions and Diagnostics [AP]	C0015-C0048
	Retinal diseases Epidemiology and Treatment [CL]	C0133-C0160
	Visual impairment and visual quality of life [CL]	C0161-C0198
2:15–4pm	Glaucoma Surgery and Wound Healing [GL]	C0267-C0316
	Clinical Studies and Clinical Research [GL]	C0317-C0345
	Biochemistry and Molecular Biology of the Retina/RPE [BI]	B0001-B0069
	Genetic variants in human ocular disease [BI]	B0070-B0120
	Retinal detachment, proliferative vitreoretinopathy and trauma [RE]	B0205-B0241
	Corneal stroma: Keratocytes, wound repair and healing [CO]	C0049-C0071
	Retinal prostheses, cell transplantation and gene therapy [RE]	C0072-C0096
Retinitis pigmentosa [RE]	C0097-C0132	

Poster board numbers correspond to poster location in the Exhibit Hall.

B = Poster Area B, C = Poster Area C.

Wed., April 26 ■ Posters

Time	Session Title	Board #
2:15–4pm (continued)	New biomarkers and preclinical [MOI]	C0199-C0224
	Animal Models [GL]	C0225-C0246
	Ocular Flow and Biomechanics [GL]	C0247-C0266
	Physiology/Pharmacology: Trabecular meshwork and Retina/RPE [PH]	C0346-C0357

MIT Poster Award Session & Judging

Wed., April 26 | 5:30–7pm | Mosaic Lounge

MIT First Authors of the top five scored poster abstracts from each Scientific Section and Cross-sectional Group will participate in the MIT Outstanding Poster Award Competition. One award recipient from each Scientific Section and Cross-sectional Group will be selected by judges from each scientific section. Award recipients will be selected based on how well a poster displays the abstract's research and on how effectively the MIT First Author discusses the research with the judges and with meeting participants.

All meeting participants are invited to view the competing posters and presentations. Winners will be announced on Thursday at the Closing Keynote Session.

Light refreshments will be served.

Poster board numbers correspond to poster location in the Exhibit Hall.
B = Poster Area B, C = Poster Area C.

Thurs., April 27 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
8–10am	Aging and sex as risk factors across multiple eye diseases – Understanding the biological roles they play [LE] — Symposia	*	Great Hall BC
	Advanced molecular and bioinformatics methods define a new horizon for eye disease [IM] — Symposia		La Nouvelle C
10:30am– 12:15pm	Retinopathy of prematurity [RE]		353-355
	Lens fibrosis and stress [LE]	*	343
	Visual Fields and Psychophysics [GL]		255-257
	Corneal development and cell differentiation [CO]	*	252-254
	Uveitis Therapeutics: Current State of the Art and Future Directions [IM]	*	243
	Myopia: Emerging Clinical Interventions and Outcomes [AP]		R09
	New frontiers in retina/RPE biology [BI]		R07-R08
	Aqueous humor dynamics, trabecular meshwork and ciliary body 2 [GL]	*	R04-R05
	Modeling inherited retinal disease [RC]	*	R02-R03
	Retina/RPE: Physiology, Pharmacology and Metabolism [PH]		R01
	AMD Clinical Trials [RE]	*	Great Hall BC
12:45– 2:30pm	New machine learning methods for image analysis [MOI]		356-357
	Retinitis pigmentosa [RE]		353-355
	Health Care Delivery [CL]	*	345
	Eye Movement Disorders [EY]		344
	Cataract and intraocular lenses [VI]	*	255-257
	ERG: Basic Mechanisms and Disease [VN]	*	244

Thurs., April 27 ■ Papers, Sessions, Lectures, etc.

Time	Title/ Section	CME Accredited	Location
12:45– 2:30pm (continued)	Macular diseases excluding AMD [RE]		R07-R08
	Cornea: other [CO]	*	R06
	Glaucoma Surgery and Lasers [GL]		R04-R05
	Age and cellular senescence [RC]	*	R02-R03
4–5:15pm	The beauty of sensory diversity — Closing Keynote		Great Hall AD



NAEVR

National Alliance For
Eye And Vision Research

Visit NAEVR Central in the Exhibit Hall

Hours: Sun. – Wed., 8:30am–5pm

Hosted by NAEVR's Dan Ignaszewski and David Epstein

- Contact Congress to support vision research funding increases
- Learn about research funding resources, such as multiple Department of Defense (DoD) funding opportunities to meet critical vision research gaps

NAEVR's Defense-Related Vision Research Opportunities Session

Mon., April 24, 7–8:30am, Rivergate Room

NAEVR has invited DoD representatives to speak about FY2023 funding opportunities and past DoD awardees to offer insights into how researchers can be most responsive to the funding Program Announcement.

eyerresearch.org

Thurs., April 27 ■ Posters

Time	Session Title	Board #
8–9:45am	Insights into anterior segment disorders, periadnexal and orbital disorders, and development [AP]	B0001-B0024
	Corneal surgery: non refractive [CO]	B0079-B0101
	Corneal Surgery Refractive [CO]	B0102-B0120
	Ocular Inflammatory Disease Measurements and Impact [IM]	B0121-B0155
	Animal Models of retinal injury and disease [RC]	B0251-B0283
	Glaucoma Lasers [GL]	C0001-C0016
	Retinopathy of prematurity [RE]	C0064-C0087
	Myopia and refractive error development [VI]	C0121-C0151
	Ocular biometry and modelling [VI]	C0152-C0171
	Numerical techniques in visual optics [VI]	C0196-C0212
	Other technologies and developments [MOI]	C0244-C0270
	Non-optical imaging [MOI]	C0271-C0280
	Low vision: self-report and performance measures [LV]	C0293-C0306
10:30am–12:15pm	Cornea: Other 1 [CO]	B0026-B0052
	Cornea: Other 2 [CO]	B0053-B0078
	Anti-inflammatory agents, antibiotics, and ocular toxicology [PH]	B0156-B0168a
	Retinoids and carotenoids [BI]	B0169-B0178
	Retinal disease, regeneration, and repair [VN]	B0210-B0250
	Vitreoretinal surgery [RE]	C0017-C0063
	Strabismus [EY]	C0088-C0102
	Eye Movements and Nystagmus [EY]	C0103-C0120
	Clinical assessment of vision [VI]	C0172-C0195
	Teaching, Research Publication [CL]	C0307-C0339
12:45-2:30pm	Retina Cell Biology [RC]	B0179-B0209
	Visual Fields and Psychophysics [GL]	C0213-C0243
	Brain stimulation, cortical technology and virtual reality [LV]	C0281-C0292

Poster board numbers correspond to poster location in the Exhibit Hall.

B = Poster Area B, C = Poster Area C.

ARVO Social Events

Sunday Social at Fillmore New Orleans*

Sun., April 23, 7:30–10:30pm
6 Canal St.

Always a popular event, this year's Sunday Social features a live band, NOLA-style activities and entertainment. Ticket includes admission and two drinks.



Student/Trainee Social

Mon., April 24, 6:30–8pm
Ernest N. Morial Convention Center | Mosaic Lounge

Members-in-Training are invited to join us in honoring the 2023 Travel Grant Recipients. Come and mingle with your colleagues and make new acquaintances.

ARVO Karaoke at Republic NOLA*

Wed., April 26, 9pm–12midnight
828 South Peters St.



Located in the French Quarter, this venue is ideal for showing your vocal talents or cheering on your favorite performer. Admission includes one drink. Light snacks will be provided. You must be 18 years or older to attend this event.

ARVO 2024 Seattle Kick-Off Reception

Thurs., April 27, 2:45–3:45pm
Ernest N. Morial Convention Center | Exhibit Hall

Join ARVO as we look forward to the ARVO 2024 Annual Meeting, May 5 – 9.

*Admission ticket required. Tickets available Saturday in Lobby B registration and Sunday – Wednesday at ARVO Central.

Need Flair?

Collect seven
Eye Venture
buttons for a
chance to win
free registration
to ARVO 2024



Special Interest Group sessions

Join us online for 44 Special Interest Group (SIG) sessions.

SIG sessions are open to all 2023 Annual Meeting attendees and ARVO members.

SIG Dates

- May 11
- June 13
- June 29
- Sept. 12
- Sept. 28

Sessions will take place at 8am, 12pm and 6pm U.S. ET each day.

Learn more about the SIG sessions.



[ARVO.org/SIG](https://www.arvo.org/SIG)

Conferences and Workshops

Online Conferences

- **Biomarkers in Ophthalmology**
Nov. 8 – 9
Call for proposals: May 15 – June 26
- **Advance – Research Career Development Conference** Jan. 31 – Feb. 1, 2024

Committee workshops

- May 25 — How artificial intelligence can help bring ophthalmic care to underserved communities
- June 21 — Utilizing social media to further vision research
- July 19 — Non-invasive assessment of visual system structure and function in animal models
- Sept. 6 — Funding mechanisms for eye research
- Sept. 20 — Vision health disparities in minority populations across the globe
- Oct. 4 — A practical guide to scientific branding: Establishing and maintaining a social media presence



ARVO 2023

April 23 – 27
New Orleans, La.

Exhibit Hall Hours

Sun., April 23	8:30am–5pm
Mon., April 24	8:30am–5pm
Tues., April 25	8:30am–5pm
Wed., April 26	8:30am–5pm
Thurs., April 27	8:30am –4pm

(ARVO Central and posters only)

The Association for Research in Vision and Ophthalmology gratefully acknowledges the support of exhibiting companies and Annual Meeting supporters.

Poster Hall B

659	758	759	858	859	958	959	1058	1059	1158
657	756	757	856	857	956	957	1056	1057	1156
655	754	755	854	855	954	955	1054	1055	1154

		20'		851				1051	1150
649	748	749	20'		948	NAEVR	1048		
647	746			847	946	947	1046		1147
645	744	20'						1047	1146

641		743		843		ARVO Central 937			
639	738			841					
637	736	737		839					
				837	936				

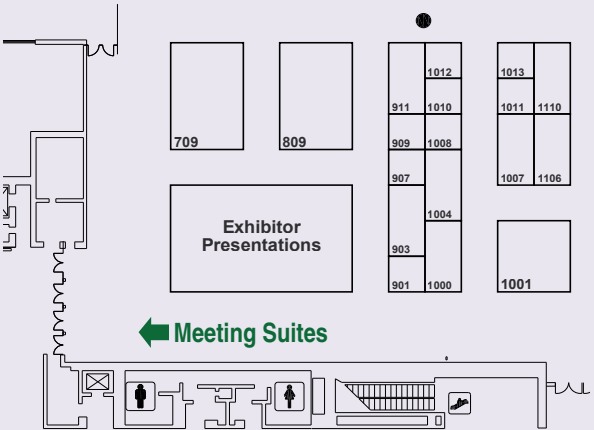
Networking Lounge B				831				1031	
					928	929	1028		1128
				827		927	1026	1027	1126
				825	924	925	1024	1025	1124

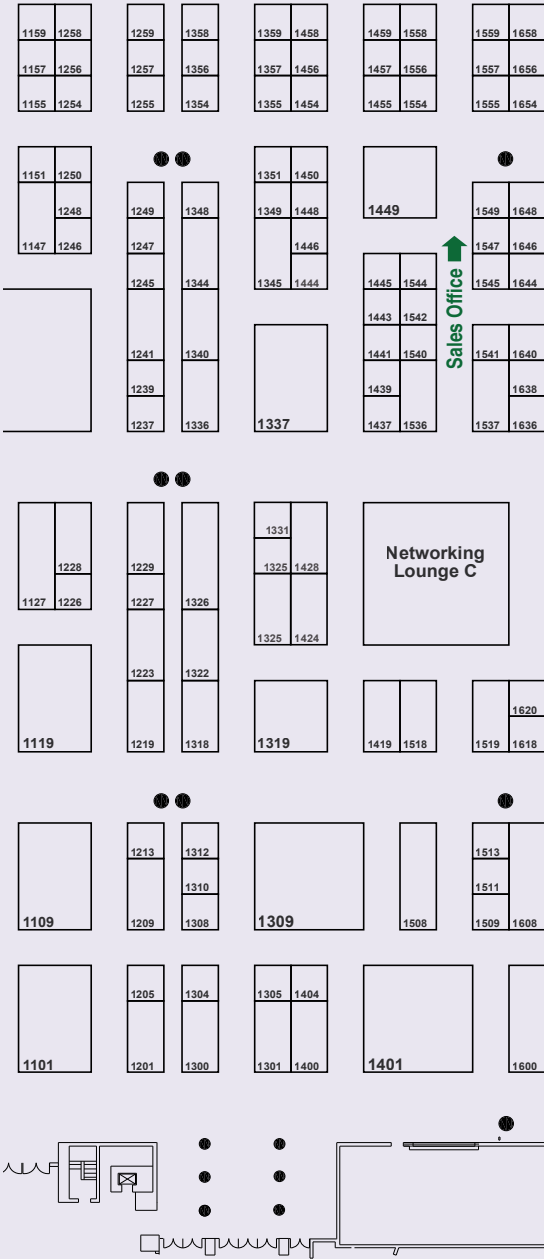
621	720								
619	718	719		819		919	1018	1019	

		709		809		911	1012	1013	
						909	1010	1011	1110
						907	1008	1007	1106
							1004		
						903			
						901	1000	1001	

Exhibitor Presentations

← Meeting Suites





Poster Hall C

Entrance

20/20 Onsite 1348
 29 Garden St.
 Everett, Mass. 02149
 2020onsite.com
 Contact: Jessica Mays; 617-812-9453; jmays@2020onsite.com

A

Aero Pump GmbH..... 825
 Dr.-Ruben-Rausing-Str. 5
 Hochheim am Main, 65239
 Germany
 aeropump.de
 Contact: Rouven Kraus; +49 6146603-115; rouven.kraus@aeropump.de

Aier Eye Hospital Group 854
 No. 83 Wuzhong Rd.
 Shanghai, Shanghai 200235
 China
 aierchina.com
 Contact: Chong Shen; +86 18795991569; shenchong@aierchina.com

Alcon Vision, LLC 1101
 6201 South Freeway
 TC-425-3
 Fort Worth, Texas 76134
 alcon.com
 Contact: Sarah Bittle: 817-363-1017; sarah.bittle@alcon.com

Alimera Sciences..... 1011
 6310 Town Sq., Suite 400
 Alpharetta, Ga. 30005
 alimerasciences.com
 Contact: Bonnie Perkins; 678-527-1758; bonnie.perkins@alimerasciences.com

Allergan, an Abbvie Company 1419
 2525 Dupont Dr.
 Irvine, Calif. 92612
 abbvie.com
 Contact: Mary Mikels; 714-246-4500; mary.mikels@abbvie.com

Allergan, an AbbVie Company Medical Affairs 903
 2525 Dupont Dr.
 Irvine, Calif. 92612
 abbvie.com
 Contact: Meredith Johnson; 714-246-4500; meredith.johnson@abbvie.com

Altasciences..... 1010
 575 Armand-Frappier Blvd.
 Laval, QC H7V 4B3
 Canada
 altasciences.com
 Contact: Sophie Dubois; 450-973-6077; sdubois@altasciences.com

- Apellis Pharmaceuticals** 1326
 100 5th Ave.
 Waltham, Mass. 02451
 Apellis Pharmaceuticals
 617-977-5700; info@apellis.com
- Apellis Pharmaceuticals** 1340
 100 5th Ave.
 Waltham, Mass. 02451
 Apellis Medical Affairs
 617-977-5700; medinfo@apellis.com
- Aptar Pharma** 1223
 250 North Route 303
 Congers, N.Y. 10920
 aptar.com/pharmaceutical/delivery-routes/eye-care
 Contact: Bo Thompson; 845-639-3700; bo.thompson@aptar.com
- Association Ocular Pharmacology and Therapeutics** 1148
 4819 Emperor Blvd., Suite 400
 Durham, N.C., 27703
 aopt.org
 Contact: Cheryl L. Rowe-Rendleman; 925-872-0691;
 crrendleman@omarconsultants.com
- Atelerix Ltd.** 1445
 Atelerix Ltd., The Biosphere, Draymans Way, Newcastle Helix
 Newcastle Upon Tyne NE4 5BX
 U.K.
 atelerix.co.uk
 Contact: Lindsay Smith; +44 (0) 7572 313 876; lindsay.smith@atelerix.co.uk
- Atheln, Inc.** 1157
 6051 Scripps St.
 San Diego, Calif. 92122
 athelnbiomed.com
 Contact: Adriana Manzi; 858-405-4584; adriana@athelnbiomed.com
- Aurora Surgical, LLC** 718
 780 94TH Ave. N, Suite 108
 St Petersburg, Fla. 33702
 aurorasurgical.com
 Contact: Lena Jonsson; 727-821-3303; ljonsson@aurorasurgical.com
- AYOXXA Biosystems, Inc.** 923
 c/o Platinum CFO
 2600 Tower Oaks Blvd., Suite 220
 Rockville, Md. 20852
 ayoxxa.com
 Contact: Alex Kiraly; 704-491-8746; alex.kiraly@ayoxxa.com

B

Bitfount..... 1254
 128 City Rd.
 London, EC1V 2NX
 U.K.
 bitfount.com
 Contact: Naaman Tammuz; +44020 7183 4479 ; invoices@bitfount.com

Bloomage Biotechnology USA, Inc...... 837
 181 New Rd., Suite 308
 Parsippany, N.J. 07054
 bloomagebioactive.com/index-e.html
 Contact: Gavin Lee; 973-396-7691; lixq@bloomagebioactive.com

BrightFocus Foundation..... 1318
 22512 Gateway Center Dr.
 Clarksburg, Md. 20871
 brightfocus.org
 Contact: Kara Summers; 301-948-3244; ksummers@brightfocus.org

C

C. Light Technologies, Inc...... 720
 84 High St., Suite 303
 Medford, Mass. 02155
 clighttechnologies.com
 Contact: Christy Sheehy; 518-339-2895; christy@clighttechnologies.com

Cambridge Research Systems..... 946
 80 Riverside Estate
 Sir Thomas Longley Rd.
 Rochester, Kent ME2 4BH
 U.K.
 crsltd.com
 Contact: Caterina (Katia) Ripamonti; 8804; c.ripamonti@crsltd.com

Celanese..... 1227
 222 W. Las Colinas Blvd., Ste 900N
 Irving, Texas 75039
 healthcare.celanese.com/
 Contact: Lisa Forsell; 214-632-9186; lisa.forsell@celanese.com

Centre for Eye and Vision Research 954
 Room 901-903, 17W, Hong Kong Science Park,
 Pak Shek Kok, Sha Tin
 Hong Kong
 cevr.hk
 Contact: Sabrin Tsui; +852 5208 6310; amm@cevr.hk

Charles River 1128
 251 Ballardvale St.
 Wilmington, Mass. 01887-1000
 criver.com
 Contact: Kerri Keane; 774-329-1679; kerri.keane@crl.com

- Chona Surgical Co..... 1618**
 E-209A GTB Enclave
 Delhi, 110093
 India
 chonasurgical.com
 Contact: Hemant Chona; +91 9899787779; chonasurg@yahoo.co.in
- Choroideremia Research Foundation..... 1000**
 23 E. Brundreth St.
 Springfield, Mass. 01109
 curechm.org
 Contact: Kathi Wagner; 800-210-0233; kathiwagner@curechm.org
- Clinical Trials Resource Group..... 1450**
 25568 Genesee Trail Rd
 Golden, Colo. 80401
 ctrgresearch.com
 Contact: Kristoffer Mirkin; 805-618-8785; kmirkin@ctrgresearch.com
- Cognition Therapeutics..... 1351**
 2500 Westchester Ave
 Purchase, N.Y. 10577
 cogrx.com
 Contact: Aline Sherwood; 201-294-9560; info@cogrx.com
- Coherus Biosciences..... 1002**
 333 Twin Dolphin Dr., Suite 600
 Redwood City, Calif. 94065
 coherus.com
 Contact: Diane DeVoe; 650-395-0190; rfinuliar@coherus.com
- Congressional Directed Medical Research Programs 1541**
 1077 Patchell St.
 Fort Detrick, Md. 21702
 cdmrp.health.mil
 Contact: Christopher Siple; 301-619-6882; christopher.e.siple.civ@health.mil
- CorEvitas..... 909**
 300 5th Ave., Suite 3020
 Waltham, Mass. 02451
 corevitas.com
 Contact: Karen Krewson; 609-480-6953; kkrewson@corevitas.com
- Corza/Katena..... 1025**
 6 Campus Dr., Suite 310
 Parsippany, N.J. 07054
 corzaeye.com
 Contact: Gowtham Atluri; 973-989-1600; gowtham.atluri@corza.com
- Cylite..... 736**
 7 / 45 Normanby Road
 Notting Hill, VIC 3168
 Australia
 cyliteoptics.com
 Contact: Kylee Hall; 61423575505; kylee.hall@cyliteoptics.com

D

- Del Ray Pharma** 1330
 1625 S Congress Ave
 Delray Beach, Fla. 33445
 delraypharma.com
 Contact: Jennifer Smith; 800-681-6891; info@delraypharma.com
- Diagnosys, LLC**..... 1127
 55 Technology Dr., Suite 100
 Lowell, Mass. 01851
 diagnosysllc.com
 Contact: Agatha Gornisiewicz; 978-458-1600; agatha@diagnosysllc.com
- Doheny and UCLA Stein Eye Institutes**.....737
 150 N. Orange Grove
 Los Angeles, Calif. 91103
 doheny.org
 Contact: Cecilia Zamudio; 323-342-7106; cczamudio@doheny.org
- Dompé Medical Affairs**.....MS2
 181 2nd Ave., Suite 600
 San Mateo, Calif. 94401
 dompe.com
 Contact: Bianca Baker; 833-366-7387; usmedinfo@dompe.com

E

- EarlySight SA**..... 1537
 Avenue de Sécheron 15
 Geneva1202
 Switzerland
 earlysight.com
 Contact: Benedetto Sgroi; 3.9335729935e+11;
 benedetto.sgroi@earlysight.com
- Elsevier, Inc**..... 1124
 1600 JFK Blvd., Suite 1600
 Philadelphia, Ps. 19103
 us.elsevierhealth.com
 Contact: Melanie Spain; 215-239-3900; m.spain@elsevier.com
- Emmes**..... 1004
 401 North Washington St., Suite 700
 Rockville, Md. 20850
 emmes.com
 Contact: Supriya Menezes; 301-251-1161; smenezes@emmes.com
- Encompass Pharmaceutical Services, Inc**..... 928
 150 Technology Parkway, N.W.
 Norcross, Ga. 30092
 encompass-pharma.com
 Contact: Rick Coulon; 770-248-4501-260;
 rick.coulon@encompass-pharma.com

- Epsilon USA**..... 1312
 13851 Roswell Ave. Suite I
 Chino, Calif. 91710
 epsilonusa.com
 Contact: Mohammed Ibrahim; 909-984-4614; epsilonusa1@gmail.com
- eSight**..... 1355
 1 Eglinton Ave.
 Toronto, ON M4P 3A1
 Canada
 esightvision.com
 Contact: Roland Mattern; 905-515-1599; roland@esightcorp.com
- Espansione Group**..... 1154
 Blocco 27 Via Degli Orefici 152 Centergross
 Funo, Bologna 40050
 Italy
 espansionegroup.it
 Contact: Riccardo Nicoletti; 3.9051890161e+11; info@espansione.it
- Espansione Group**..... 1155
 Blocco 27 Via Degli Orefici 152 Centergross
 Funo, Bologna 40050
 Italy
 espansionegroup.it
 Contact: Riccardo Nicoletti; 3.9051890161e+11; info@espansione.it
- Eversight** 1636
 6700 Euclid Ave, Suite 101
 Cleveland, Ohio 44103
 eversightvision.org/
 Contact: Onkar Sawant, PhD; 979-204-0987; osawant@eversightvision.org
- Experimentica, Ltd**..... 1428
 Mikrokatu 1
 P.O. Box 1188
 Kuopio
 Finland
 experimentica.com
 Contact: Giedrius Kalesnykas; 8122; info@experimentica.com
- Exsera BioLabs**..... 1126
 1775 Aurora Ct. Room M20-3201N
 Aurora, Colo. 80045
 Contact: Ally Weick; 303-724-7592; allyson.weick@cuanschultz.edu
- EyeBioKorea** 1441
 81, Jinsa-ro 83beon-gil, Busanjin-gu
 2nd floor, Life Center of the Future
 Busanjin-gu, Busan 47397
 South Korea
 eyebioskorea.com
 Contact: Jaewook Yang; info@eyebioskorea.com

EyeCRO	1508
5301 N. Beverly Dr. Oklahoma City, Okla. 73105 eyecro.com Contact: Rafal Farjo; 405-604-8954; rfarjo@eyecro.com	
Eyenuk, Inc.	1424
5850 Canoga Ave. Suite 250 Woodland Hills, Calif. 91367 eyenuk.com Contact: Claude Greer; 818-835-3585; claude.greer@eyenuk.com	
EyeQue Corp.	1336
39608 Eureka Dr. Newark, Calif. 94560 eyeque.com Contact: NoamSapiens; 408-630-5086; noam.sapiens@eyeque.com	
F	
Fareva	1543
24 West 57th St. Ste 505 New York, N.Y. 10019 fareva.com/pharmaceuticalindustry.html Contact: Robert Klehr; 908-813-8595; bklehr.usa@fareva.com	
G	
Gene Tools, LLC	1304
1001 Summerton Way Philomath, Ore. 97370 gene-tools.com Contact: Zhengfeng Li; 541-929-7840-1011; zli@gene-tools.com	
Genentech, A Member of the Roche Group	1309
1 DNA Way South San Francisco, Calif. 94080 gene.com Contact: Sue Garcia; 650-255-1000; sgarcia@gene.com	
Genentech, A Member of the Roche Group	MS4
1 DNA Way South San Francisco, Calif. 94080 gene.com Contact: Sue Garcia; 650-255-1000; sgarcia@gene.com	
Genesis Drug Discovery & Development (GD3)	1536
1000 Waterview Dr. Hamilton, N.J. 08691 gd3services.com Contact: Stephanie Thompson; 844-272-8234; Sthompson@mdlab.com	

- Geuder AG**..... 637
 Hertzstr. 4
 Heidelberg, Baden-Wurttemberg 69126
 Germany
 geuder.de/en
 Contact: Michaela Weis; 49-6221-306-6; mweis@geuder.de
- Glauconix Biosciences, Inc.** 1027
 257 Fuller Rd.
 Albany, N.Y. 12203
 glauconix-biosciences.com/
 Contact: George Torrejon; 631-487-5553;
 Gtorrejon@glauconix-biosciences.com
- Global Vision Technologies** 925
 514 West Maple St.. Suite 401
 Cumming, Ga. 30040
 clinicalpursuit.com
 Contact: James Harris; 678-573-6280; jim.harris@globalvisiontech.com
- Globe Biomedical** 827
 5225 Canyon Crest Dr.
 Suite 360
 Riverside, Calif. 92507
 globebiomedical.com
 Contact: Joshua Park; 951-312-1800; admin@globebiomedical.com
- H**
- Heidelberg Engineering, Inc.** 1119
 10 Forge Parkway
 Franklin, Mass. 02038
 heidelbergengineering.com
 Contact: Deanne Redick; 508-530-7847;
 deanne.redick@heidelbergengineering.com
- I**
- ICARE USA**..... 1519
 4700 Falls of Neuse Road. Suite 245
 Raliegh, N.C. 27609
 icare-world.com/us
 Contact: Keshia Sanchez; 888-422-7313; keshia.sanchez@icare-world.com
- Ichor Life Sciences, Inc.** 847
 2561 US Route 11
 LaFayette, N.Y. 13084
 ichorlifesciences.com
 Contact: Christopher Schillo; 315-677-8400; marketing@ichorlifesciences.com
- Imagine Eyes**..... 1300
 18 rue Charles de Gaulle
 Orsay, 91400
 France
 imagine-eyes.com
 Contact: Laurent Vabre; 33-164-861-566; lvabre@imagine-eyes.com

Infocus Clinical Research 1338
 105 Continental Pl.
 Nashville, Tenn. 37027
 infocusclinical.com/
 Contact: Alexa Erazo; 615-312-8295; info@infocusclinical.com

Intalight..... 1226
 1601 McCarthy Blvd.
 Milpitas, Calif. 95035
 svisionImaging.com
 Contact: Joe Garibaldi; 510-396-3729; Joe.Garibaldi@svisionresearch.com

Integral BioSystems, LLC 1054
 23 Crosby Dr., Suite 100A
 Bedford, Mass. 01730
 integralbiosystems.com/
 Contact: Dave Karasic; 617-820-8483; dkarasic@integralbiosystems.com

International Society for Eye Research 1239
 655 Beach St.
 San Francisco, Calif. 94109
 iser.org
 Contact: Michael Paulos; 415-561-8569; mail@iser.org

Iris Pharma 1301
 Allee Hector Pintus
 La Gaude 06610
 France
 Contact: iris-pharma.com; 33-493-594-959; marketing@iris-pharma.com

Iveric Bio 749
 8 Sylvan Way
 Parsippany, N.J. 07054
 Contact: Trisha Purcell; 973-224-7360; trisha.purcell@ivericbio.com

J

JAMA Network 1012
 330 N. Wabash Ave.
 Suite 39300
 Chicago, Ill. 60611
 jamanetwork.com
 Contact: Millette Jackson-Bates; 312-464-4868;
 millette.jackson-bates@ama-assn.org

Janssen Pharmaceuticals..... 709
 790 Township Line Rd. Suite 200
 Raritan, N.J . 19067
 retina.janssenmedicalaffairs.com
 Contact: Jenna Zeringo; 215-504-5082; jenna.zeringo@lumanity.com

Janssen Pharmaceuticals.....MS3
 790 Township Line Rd., Suite 200
 Raritan, N.J. 19067
 retina.janssenmedicalaffairs.com/#/
 Contact: Jenna Zeringo; 215-504-5082; jenna.zeringo@lumanity.com

JOINN-Laboratories (Suzhou), Inc. 641
 No.1 Zhaoxi Road, Taicang BioMedical Industrial Park
 Suzhou, 215421
 China
 joinnbio.com.cn
 Contact: Zheng Yao; 33010392; joinnbio@joinnbio.com.cn

Jorvec Corp...... 1308
 6860 SW 81 St.
 Miami, Fla. 33143
 jorvec.com
 Contact: Edward Miskie; 305-668-6102; info@jorvec.com

Jubilant HollisterStier 1544
 3525 N. Regal St.
 Spokane, Wash. 99207-5788
 jublhs.com/
 Contact: David Belloso; 732-705-0637; david.belloso@jubl.com

K

Keeler Instruments 1201
 3222 Phoenixville Pike, Bldg 50
 Malvern, Pa. 19355
 keelerusa.com
 Contact: Shane Breen; 610-353-4350; sbreen@keelerusa.com

Konan Medical USA, Inc...... 1310
 15770 Laguna Canyon Rd., Suite 150
 Irvine, Calif. 92618
 konanmedical.com
 Contact: Ian McMillan; 949-576-2200; tradeshow@konanmedical.com

Kugler Publications 1024
 P.O. Box 20538
 Amsterdam, 1001NM
 The Netherlands
 kuglerpublications.com
 Contact: Simon Bakker; 31-20-684-5700; simonbakker@kuglerpublications.com

L

Labcorp Drug Development 1404
 531 S. Spring St.; urlington, N.C. 27215
 labcorp.com
 Contact: Dana Mahoney; 888-522-2677; dana.mahoney@covance.com

Laboratoires Kôl 1644
 22 Allée Alan Turing
 Clermont-Ferrand, 63000
 France
 pds.laboratoires-kol.com
 Contact: Lisa Gandeboeu; 3306491623; contact@laboratoires-kol.com

LENZ Therapeutics 1247
 125 S. Hwy. 101
 Solana Beach, Calif. 92075
 lenz-tx.com
 Contact: Kat Simonovic; 480-309-1009; kat@lenz-tx.com

Lexitas Pharma Services, Inc.	1325
313 Foster St. Durham, N.C. 27701 lexitas.com Contact: Kim Morris; 919-280-9167; kim.morris@lexitas.com	
Lions Eye Institute for Transplant and Research	1013
1410 N. 21st St. Tampa, Fla. 33605 lionseyeinstitute.org Contact: Heidy Gonzalez; 813-289-1200; HGonzalez@lionseyeinstitute.org	
Lions Gift of Sight	1146
1000 Westgate Drive St., Suite 260 Saint Paul, Mn. 55114 lionsgiftofsight.org Contact: Sung Lee; 612-626-2682; leex1878@umn.edu	
LKC Technologies, Inc.	1209
2 Professional Dr.. Suite 222 Gaithersburg, Md. 20879 lkc.com Contact: James Datovech; 301-840-1992; sales@lkc.com	
Lubrizol Life Science – Health	1443
9911 Brecksville Rd. Cleveland, Ohio 44141 lubrizol.com/Health/Pharmaceuticals Contact: Gabe Ellis; 234-205-0010; lifesciences@lubrizol.com	
Lumedica Vision	1022
404 Hunt St. Durham, N.C. 27701 lumedicavision.com Contact: McKenzie Peterson; 919-244-2128; info@lumedica.com	
LumiThera, Inc.	1147
19578 10th Ave. NE, Suite 200 Poulsbo, Wash. 98370 lumithera.com Contact: Allison Dabney; 844-342-3333; adabney@lumithera.com	
LUTRONIC	619
219, Sowon-ro, Deogyang-gu Goyang-si, Gyeonggi-do 10534 South Korea lutronicvision.com Contact: Gayoung Kim; 070-4714-6097; gykim1@lutronic.com	

M

M&S Technologies	1237
5715 W. Howard St. Niles, Ill. 60714 mstech-eyes.com/products/category/clinical-trial-suite Contact: Susan Tanaka; 847-763-0500; stanaka@mstech-eyes.com	

- Med Learning Group** 645
 9309 N. Florida Ave., Suite 100
 Tampa, Fla. 33612
 vision-relief.com
 Contact: Amanda Jenkins; 908-418-1445; ajenkins@medlearninggroup.com
- Medimaging Integrated Solution, Inc.** 1057
 3F, No.24-2, Industry E. Rd. Iv
 Hsinchu City 30077
 Taiwan
 miis.com.tw
 Contact: Yunee Chien; 886-3-5798860; yunee.chien@miis.com.tw
- MedOne Surgical** 1331
 670 Tallevast Rd.
 Sarasota, Fla. 34243
 MedOne.com
 Contact: Bruce Beckstein; 941-359-3129; bbeckstein@medone.com
- MedTech International Group** 839
 21175 State Hwy. 249
 Houston, Texas 77070
 Contact: Tamir Haimov; 888-507-7917; tamir@medtechinternationalgroup.com
- MeltPrep** 1256
 Nikolaiplatz 4
 Graz 8020
 Austria
 meltprep.com
 Contact: Valentina Troiss; 4.3677624011e+12; offices@meltprep.com
- MERIT** 1337
 6527 Normandy Ln., Suite100
 Madison, Wisc. 53719
 meritcro.com
 Contact: Stacy Sanderson; 608-284-8810; ssanderson@meritcro.com
- Metrovision**..... 831
 4 rue des Platanes
 Perenchies, 59840
 France
 metrovision.fr
 Contact: Jacques Charlier; 33-32-017-1956; charlier@metrovision.com
- Modulight Corp.** 1205
 470 Ramona St.
 Palo Alto, Calif. 94301
 modulight.com
 Contact: Kelly Keodara; 408-573-6291; marketing.communication@modulight.com
- MS State University** 1448
 P.O Box 6189
 Mississippi State, Miss. 39762
 blind.msstate.edu
 Contact: Anne Steverson; 662-325-2001; asteverson@colled.msstate.edu

N

- Nanoscope Instruments**..... 1245
 1312 Brown Tr., Suite D
 Bedford, Texas 76022
 nanoscopeinstruments.com
 Contact: Sulagna Bhattacharya; 626-244-5300; ceo@nanos therapeutics.com
- Nanoscope Therapeutics** 1056
 2777 N Stemmons Fwy.
 Dallas, Texas 75207
 nanos therapeutics.com
 Contact: 817-857-1186; accounts@nanos therapeutics.com
- National Alliance for Eye and Vision Research**..... 947
 5515 Security Ln., Suite 500
 Rockville, Md. 20852
 eyeresearch.org
 Contact: Dan Ignaszewski; 240-221-2905; Dan@eyeresearch.org
- National Disease Research Interchange** 851
 Three Parkway, 1601 Cherry St., Suite 1700
 Philadelphia, Pa. 19102
 ndrresource.org
 Contact: Matthew Reece; 215-557-7361; mreece@ndrresource.org
- National Eye Institute** 936
 10 Center Dr.; Room 10N109
 Bethesda, Md. 20892-1860
 nei.nih.gov
 Contact: Kerry Goetz; 301-443-7835; goetzke@nei.nih.gov
- Nemera** 901
 63 Ave. Tony Garnier
 Lyon 69007
 France
 nemera.net
 Contact: Dylan Biscione; 33627393719; dylan.biscione@nemera.net
- Newcells Biotech** 857
 Biosphere
 Newcastle upon Tyne NE4 5BX
 U.K.
 newcellsbiotech.co.uk
 Contact: Jenny Cheung; 4.4191580618e+11;
 Jenny.Cheung@newcellsbiotech.co.uk
- Nidek**..... 1319
 2040 Corporate Ct.
 San Jose, Calif. 95131-1753
 usa.nidek.com
 Contact: Hiro Matsuzaki; 408-468-6400; trade_show@nidek.com

- Nitra** 1250
 285 Fulton St., 1 World Trade Center
 New York, N.Y. 10007
 nitra.com
 Contact: Maud Ricaurte; 443-994-0263; maud@nitra.com
- O**
- Ocugen** 1344
 11 Great Valley Pkwy.
 Malvern, Pa. 19355
 ocugen.com
 Contact: John d'Esterhazy; 484-328-4775; john.desterhazy@ocugen.com
- Ocular Clinical Research Company** 842
 1560 East Southlake Blvd.
 Southlake, Texas 76092
 ocularcrc.com
 Contact: Nnenna Ihekoromadu; 866-628-5272; info@ocularcrc.com
- Ocular Clinical Research Connect** 743
 920 Rhone Ln.
 Southlake, Texas 76092
 ocularcrc.com
 Contact: Nnenna Ihekoromadu; 866-628-5272; info@ocularcrc.com
- Ocular Instruments** 1110
 2255 116th Ave., NE
 Bellevue, Wash. 98004
 ocularinc.com
 Contact: Customer Service; 425-455-5200; contact@ocularinc.com
- Oculus, Inc** 738
 17721 59th Ave. NE
 Arlington, Wash. 98223
 oculususa.com
 Contact: Jennifer Conway; 425-670-9977; marketing@oculususa.com
- OcuMetrics, Inc** 1008
 2224-C Old Middlefield Way
 Mountain View, Calif. 94043-2421
 ocumetrics.com
 Contact: Bruce Ishimoto; 650-960-3955; brucei@ocumetrics.com
- OcuSci, Inc** 1255
 15043 Paso Del Sol
 Del Mar, Calif. 92014
 ocusci.com
 Contact: David McMahon; 888-809-6424; dm@ocusci.com
- OcuScience** 1228
 2764 North Green Valley Pkwy, Suite 262
 Henderson, Nev. 89014
 Ocu-Science.com
 Contact: Daniel Lindgren; 866-250-3937; dl@Ocu-Science.com

OHSU Casey Eye Institute	841
515 SW Campus Dr. Portland, Ore. 97239 ohsu.edu/casey Contact: Leslie Lesner; 503-494-7917; lesner@ohsu.edu	
Olleyes	1048
350 Springfield Ave., Suite 200 Summit, N.J. 07901 olleyes.com Contact: Melissa Satta; 855-655-3937; info@olleyes.com	
Ophthalmatics, LLC	1248
2830 Arabian Tr. Marietta, Ga. 30062 ophthalmatics.com Contact: Awais Bajwa; 862-222-6680; contact@ophthalmatics.com	
Optoprobe Science, Ltd.	1620
Room 352, Langguang yunding Majiapu Road, No.180 F engtai District, Beijing China optoprobe-medical.com Contact: Junqiang Liang; 861-771-8471-267; liangjunqiang@iopto.cn	
Optos, Inc	1400
500 Nickerson Rd., Suite 201 Marlborough, Mass. 01752 optos.com Contact: Emily Vieira; 508-787-1585	
OptymEdge	955
401 N. Washington St. Suite 700 Rockville, Md. 20850 optymedge.com Contact: Saqib Parkar; 301-251-1161; sparkar@optymedge.com	
Ora, Inc	1401
300 Brickstone Square Andover, Mass. 01810 oraclinical.com Contact: Alec Jones; 978-685-8900; ajones@oraclinical.com	
OSOD, LLC	1007
6527 Normandy Ln., Suite 100 Madison, Wisc. 53719 ocularservices.com Contact: Gary Leatherberry; 608-206-3614; gleatherberry@ocularservices.com	

P

PharmaLegacy	1449
10526 Sanshey Ln., Unit 108 San Diego, Calif. 92127 pharmalegacy.com Contact: Matthew Ericson; 858-914-8063; matthew.ericson@pharmalegacy.com	

- Pharmaron**..... 1229
 436 Creamery Way, Suite 400
 Exton, Pa. 19341
 pharmaron.com
 Contact: Kelly Merroth; 267-962-6655; kelly.merroth@pharmaron.com
- Phelcom Technologies, LLC** 1354
 The Village Works – 769, Centre
 Boston, Mass. 02130
 phelcom.com
 Contact: Amanda Arthur; 857-265-6200; international@phelcom.com
- Philophos, Inc.** 1439
 #407, 172, Dolma-ro, Bundang-gu, Seongnam-si,
 Gyeonggi-do, Seongnam-si 13605
 The Republic of Korea
 philophos.com
 Contact: +82.70.4652.3494; sales@philophos.com
- Phoenix MICRON** 1600
 543 NW York Ave, Suite 100
 Bend, Ore. 97703
 phoenixmicron.com
 Contact: Chris Siville; 541-668-7539; sales@phoenixmicron.com
- Powered Research**..... 924
 PO BOX 14650
 Durham, N.C. 27709
 poweredresearch.com
 Contact: Ali Rosenberg; 984-884-4941; Arosenberg@poweredresearch.com
- Precision Vision, Inc.** 1106
 1725 Kilkenn, Ill. 60098
 precision-vision.com
 Contact: Jessica Kopidlansky; 815-223-2022; info@precision-vision.com
- PriMed Non-human Primate Research Center of
 Sichuan PriMed Shines Bio-tech Co., Ltd.** 948
 B4-501, Tianfu Science Technology Park
 No.88, Keyuan South Rd., Hi-tech Zone
 Chengdu, Sichuan Province 610041
 China
 primed.com.cn
 Contact: Mingling Wu; 86-28-85921823; wuml@scprimed.com
- ProMed Pharma, LLC** 907
 15600 Medina Rd.
 Plymouth, Minn. 55447
 promedpharmallc.com
 Contact: James Arps; 763-331-3800; jim.arps@promedpharmallc.com
- Promedica International**..... 1305
 3100 Bristol St., Suite 250
 Costa Mesa, Calif. 92626
 promedica-intl.com
 Contact: Terrie Hopton; 714-460-7363; thohton@promedica-intl.com

Pupil Labs GmbH..... 639
 Sanderstr. 28
 Berlin, Berlin 12047
 Germany
 pupil-labs.com
 Contact: Neil Thomas; 4.9170542236e+11; nmt@pupil-labs.com

R

Regeneron..... 809
 777 Old Saw Mill River Rd.
 Tarrytown, N.Y. 10591
 regeneron.com
 Contact: Jennifer Harrison; 914-847-7000; jennifer.harrison@regeneron.com

Regeneron..... 1001
 777 Old Saw Mill River Rd.
 Tarrytown, N.Y. 10591
 regeneron.com
 Contact: Jennifer Harrison; 914-847-7000; jennifer.harrison@regeneron.com

Regeneron.....MS1
 777 Old Saw Mill River Rd.
 Tarrytown, N.Y. 10591
 regeneron.com
 Contact: Jennifer Harrison; 914-847-7000; jennifer.harrison@regeneron.com

RetinAI Medical AG..... 719
 Freiburgstrasse 3
 Bern 3010
 Switzerland
 retinai.com
 Contact: Carlos Ciller; 41764643141; carlos@retinai.com

RetInSight GmbH..... 819
 Elisabethstraße 13/1/13
 1010 Vienna
 Austria
 retinsight.com
 Contact: Arlette Goddijn; +43 (0)1 5813 881; contact@retinsight.com

Review of Ophthalmology..... 1213
 19 Campus Blvd., Suite 101
 Newtown Square, Pa. 19073
 reviewofophthalmology.com
 Contact: Michael Hoster; 610-492-1028; mhoster@jobson.com

Roland Consult Stasche & Finger GmbH..... 1031
 Heidelberger Strasse 7
 Brandenburg, 14772
 Germany
 roland-consult.com
 Contact: Joachim Finger; +49 3381 890 1034; j.finger@roland-consult.de

S

- Santen**..... 1019
 6401 Hollis St., Suite 125
 Emeryville, Calif. 94608
 santenUSA.com
 Contact: Elci Ryan; 415-268-9100; elci.ryan@santen.com
- Save Sight Registries**..... 1151
 Level 1 South Block, Sydney Eye Hospital, 8 Macquarie St.
 Sydney, NSW 2000
 Australia
 Contact: Alison Grinyer; 02-9382-7304; alison.grinyer@sydney.edu.au
- Sever Pharma Solutions** 1329
 36 Ridge Rd.
 Putnam, Conn. 06260
 severpharmasolutions.com
 Contact: Rob Sterling; 860-630-4524; rsterling@severpharmasolutions.com
- Shenyang Xingqi Pharmaceutical Co., Ltd.**..... 755
 No.68 Sishui St., Dongling District
 Shenyang
 China
 sinqi.com
 Contact: Ying Hui; 18510128848; huiying@sinqi.com
- Silgan Dispensing Systems**..... 1444
 1001 Haxall Point. Suite 701
 Richmond, Va. 23219
 silgandispensing.com
 Contact: Cat Porter; 804-489-8549; cat.porter@silgandispensing.com
- Singapore Eye Research Institute (SERI)**..... 1055
 The Academia, 20 College Rd.
 Discovery Tower Level 6
 Singapore 69856
 seri.com.sg
 Contact: Serene Ho; 65-65767318; serene.ho.x.h@seri.com.sg
- Softcare Co., Ltd.**..... 1542
 Yatsunami 243-5
 Fukutsu, Fukuoka 811-3201
 Japan
 softcare-ltd.co.jp
 Contact: Noriyoshi Takahashi; 10588; takahashi@softcare-ltd.co.jp
- Spective, LLC**..... 929
 3103 Glenwood Dr.
 Durham, N.C. 27705
 Contact: Joseph Vance; 919-452-6288; jvance@thespectivegroup.com

Speedway Delhi	621
64 1st Floor, Edward Line, Kingsway Camp Delhi 110009 India speedwaydelhi.com Contact: Jatin Pahwa; 9.198110277e+11; sales@speedwaydelhi.com	
Spherix Global Insights	1454
760 Constitution Dr..Suite 204 Exton, Pa. 19341 spherixglobalinsights.com Contact: Emily Crum; 484-653-7062; emily.crum@spherixglobalinsights.com	
StageBio	1047
5930 Main St. Mt. Jackson, Va. 22842 stagebio.com/ Contact: Dara Boyer; 514-204-4400; dboyer@stagebio.com	
StreetLab	1349
17 Rue Moreau Paris 12 75012 France streetlab-vision.com Contact: gutman emmanuel;067-389-3305; emmanuel.gutman@streetlab-vision.com	
Striatech	1046
Vor dem Kreuzberg 17 Tuebingen, Baden-Württemberg 72070 Germany stria.tech Contact: Thomas Muench;+49 7071 539130; t.muench@stria.tech	
T	
The Sturge-Weber Foundation	1638
6105 S Main St., Ste 200 Aurora, Colo. 80016 sturge-weber.org Contact: Karen L. Ball; 73-895-4445; kball@sturge-weber.org	
Thea Pharma, Inc.	1241
420 Bedford St., Suite 150 Lexington, Mass. 02420 theapharmainc.com Contact: Jennifer Pulsifer; 339-223-5593; jennifer.pulsifer@theapharma.com	
Theia Imaging, LLC	1511
201 W Main St., Ste 200 Durham, N.C. 27701 theiaimaging.com Contact: Hafeez Dhalla; 919-794-8504; Hafeez@TheiaImaging.com	

- Topcon Healthcare**..... 1219
 111 Bauer Dr.
 Oakland, N.J. 07436
 topconhealthcare.com
 Contact: Kati Spencer; 201-599-5100; kspencer@topcon.com
- Translational Imaging Innovations**..... 1246
 PO 6356
 Hickory, N.C. 28603
 tiinnovations.com
 Contact: Eric Buckland; 919-827-1200; eric@tiinnovations.com
- Trefoil Therapeutics, Inc.**..... 1156
 6330 Nancy Ridge Dr., Suite 103
 San Diego, Calif. 92121
 trefoiltherapeutics.com
 Contact: Schalon Newton; 949-678-9572; snewton@trefoiltherapeutics.com
- Trial Runners LLC**..... 1018
 116 W Villard St.
 Dickinson, N.D. 58601
 trialrunners.com
 Contact: Melissa Pavlicek; 701-690-9857; melissapavlicek@trialrunners.com
- TriApex Laboratories Co., Ltd.**..... 1518
 No.9 Xinglong Road, Jiangbei New Area
 Nanjing, Jiangsu 211800
 China
 tripod-glp.com
 Contact: Weiwei Shi; +86 025 58196588; shiweiwei@tri-apex.com
- Tsubota Laboratory, Inc.**..... 1249
 34 Shinanomachi
 304 Toshin Shinanomachi-ekimae Bldg.,
 Shinjuku-ku Tokyo
 Japan
 tsubota-lab.com/en
 Contact: Ryo Konno; 81363842866; konno@tsubota-lab.com
- Twenty Twenty Therapeutics**..... 1608
 259 E. Grand Ave.
 South San Francisco, Calif. 94080
 twentytwenty.com
 Contact: Jordan Krueger; 661-644-6054; jordan.krueger@twentytwenty.com
- U**
- Unither Pharmaceuticals** 843
 3-5 rue Saint Georges
 Paris 75009
 France
 unither-pharma.com
 Contact: Elisabeth Alidou 631573; elisabeth.alidou@unither-pharma.com

University of Nebraska Medical Center 1513
985540 Nebraska Medical Center
Omaha, Neb. 68198-5540
unmc.edu/eye/research/index.html
Contact: Kim Kanellis; 402-559-5379; kim.kanellis@unmc.edu

US Ophthalmic..... 1028
9990 NW 14th, Suite 105
Miami, Fla. 33172
usophthalmic.com
Contact: Blondie Orta; 786-621-0521; info@usophthalmic.com

V

Vasoptic Medical, Inc...... 927
6751 Columbia Gateway Dr., Suite 300
Columbia, Md. 21046
vasopticmedical.com
Contact: Hrishikesh Gadagkar; 410-245-0501; hrishikesh.gadagkar@vasoptic.com

Vial 1051
1050 Battery St., Suite 150
San Francisco, Calif. 94111
vial.com/sites/ophthalmology
Contact: Owen Allen; 630-310-1535; owen@vial.com

VialMS6
1050 Battery St., Suite 150
San Francisco, Calif. 94111
vial.com/sites/ophthalmology
Contact: Owen Allen; 630-310-1535; owen@vial.com

Viewpoint Behavior technology & Phenosys + 855
2550 Bates, Suite 404
Montreal, QC H3S 1A7
Canada
vplsi.com
Contact: Eric BATUT; 514-343-5003; ebatut@vplsi.com

Virscio, Inc...... 911
4 Science Park, 4th Floor
New Haven, Conn. 06511
virscio.com
Contact: Christopher Stanley; 203-498-9706; cstanley@virscio.com

Vision Share..... 1455
3023 N. Clark St., Suite 118
Chicago, Ill. 60657
visionshare.org
Contact: Phil Fasone; 872-808-0780; pfasone@visionshare.org

VisionGift..... 1437
2201 SE 11th Ave.
Portland, Ore. 97214-5303
visiongift.org
Contact: Corrina Patzer; 503-808-7004; corrina@visiongift.org

Visionix, Inc...... 1451
 160 Eisenhower Lane North
 Lombard, Ill. 60148
 visionix.com/us
 Contact: John Sola; 630-274-6137; j.sola@visionix.com

VO-CRO 1322
 1161 21st Ave. S, B3321 MCN
 Nashville, Tenn. 37232-2569
 vo-cro.com
 Contact: Taylor Smith; 443-617-8678; taylor.e.smith.1@vumc.org

Voxeleron, LLC 919
 13809 Research Blvd., Suite 500
 Austin, Texas 78750
 voxeleron.com
 Contact: Jonathan Oakley; 512-399-3058; jonathan@voxeleron.com

W

WaveFront Dynamics 1540
 2420 Comanche NE, Suite D-3
 Albuquerque, N.M. 87107
 wavefrontdynamics.com/
 Contact: Jeff Kolberg; 505-672-5787; jeff.kolberg@wavdyn.com

Worldcare Clinical 956
 7 Bulfinch Place, Suite 302
 Boston, Mass. 02114
 wcclinical.com/
 Contact: 610-506-8872; sjones@wcclinical.com

WuXi AppTec - Laboratory Testing Division..... 1509
 101 Morgan Lane
 Plainsboro, N.J. 08536
 labtesting.wuxiapptec.com
 Contact: Lindsey Schwenk; 609-917-0047; lindsey_schwenk@wuxiapptec.com

Z

ZeClinics..... 1446
 Carrer Marina 25-27
 Barcelona 08011
 Spain
 zeclinics.com
 Contact: Elisabet Mateu; 34930240373; commercial@zeclinics.com

ZEISS 1109
 5300 Central Parkway
 Dublin, Calif. 94568
 zeiss.com/med
 Contact: Sheryl Walder; 925-577-2691; sheryl.walder@zeiss.com

Zilia 1026
 125 Charest Blvd. East, Suite 400
 Quebec City, QC G1K 3G5
 Canada
 ziliahealth.com
 Contact: Dario Zujo; s418-681-1782; dario.zujo@ziliahealth.com

Exhibitor Presentations

The Exhibitor Education Lounge is located in the front of the Exhibit Hall. All presentations are 30 minutes, unless otherwise noted.

Sun., April 23

- **2pm – SightGlass Vision**
Manage contrast to manage myopia

Mon., April 24

- **10am – Emmes**
Expert's perspectives on ophthalmic cell and gene therapies
- **11am – Eyerising International**
Repeated low-level red-light therapy: A new treatment for myopia control
- **12pm – Tarsus Pharmaceuticals**
The latest science on Demodex Blepharitis: A disease hiding in plain sight
- **1pm – Charles River**
Developing a preclinical plan to support an IND submission for ocular cell and gene therapy
- **2pm – Ocugen**
Modifier gene therapy for treatment of inherited retinal diseases: Retinitis Pigmentosa & Leber's Congenital Amaurosis
- **3pm – Ocular CRC**
Career transitioning eye doctors to high-paying biopharma jobs

Tues., April 25

- **10am – Forge Biologics**
Accelerating gene therapy manufacturing for ocular diseases
- **11am – Altasciences**
Early development of ophthalmic drugs: Integration from lead selection to clinical proof of concept
- **2pm – Ocugen**
Nuclear receptor gene RORA as a potential therapeutic for Dry-AMD

Wed., April 26

- **9–11am – National Eye Institute**
How to successfully navigate the NEI grant application process from pre-submission to post-award
- **1pm – Pharmaron**
Studying retinal degeneration in preclinical models for inherited retinal disorders
- **2pm – Ocugen**
OCU200- a novel biologics for the treatment of DME, DR, and Wet-AMD

ARVO Fellows 2023

ARVO will induct the Fellows Class of 2023 at the opening ARVO/Alcon Keynote Session, to recognize and honor these members for their leadership, dedication and contributions to the Association.

Gold Fellows

Ron Adelman
 Abbot Clark
 Gislin Dagnelie
 Richard Dix
 Paul FitzGerald
 Juan Gallo
 Vishal Jhanji
 Hemant Khanna
 Ashok Kumar
 Allison McKendrick
 Lyne Racette
 Frances Rucker
 Hendrik Scholl
 Sangly Srinivas
 Suresh Viswanathan
 Barbara Wirostko
 Michael Wormstone
 Sarah Zhang

Silver Fellows

Steven Abcouwer
 Isabelle Audo
 Vladimir Bantseev
 Elizabeth Berger
 Peter Bex
 Eric Beyer
 Sandra Block
 Alex Bowers
 Shukti Chakravarti
 Kevin Chan
 Yan Chen
 Paul Donaldson
 Mitchell Dul
 Azza El-Remessy
 Benedetto Falsini
 Rafal Farjo
 Sina Farsiu
 Wolfgang Fink
 Gerhard Garhofer
 Stuart Graham
 Sandeep Jain
 Hari Jayaram
 Lisa Keay
 Felipe Medeiros
 Jodhbir Mehta
 Donna Peters
 Vasantha Rao
 William Ridder
 Danielle Robertson
 Daniel Saban
 Rebecca Sappington
 Arthur Sit
 Andrew F. Smith
 Enrica Strettoi
 Shivalingappa Swamynathan
 Jaime Tejedor
 Walter Wittich
 Satoru Yamagami
 Gui-Shuang Ying



Dowling Society

The ARVO Foundation for Eye Research would like to recognize the members of the Dowling Society. Established to honor the innovative vision researcher and first chairman of the ARVO Foundation Board of Governors, John E. Dowling, PhD, FARVO, the society carries forth his spirit of innovative research by recognizing individuals for their significant support of eye and vision research.

Thank you to the generous members of the Dowling Society who have made a pledge or donation of \$10,000 or more.

Gary W. Abrams, MD, FARVO and
Jane C. Werner, MD

Anthony P. Adamis, MD, FARVO
Jayakrishna Ambati, MD, FARVO
Robert E. Anderson, MD, PhD,
FARVO

Joanne Angle*, MLS, MPA

Sally S. Atherton, PhD, FARVO
and Robert Atherton

Robert B. Barlow*, PhD, FARVO
and Patricia Barlow

Haydee E. P. Bazan, PhD, FARVO
and Nicolas G. Bazan, MD,
PhD, FARVO

Bernard Becker*, MD, FARVO

David C. Beebe*, PhD, FARVO
and Mrs. Betsy Beebe, PA-C

Paul S. Bernstein, MD, PhD,
FARVO and Ann Bernstein

Eliot L. Berson*, MD, FARVO and
Kyra Kaplan-Berson

Roger W. Beuerman*, PhD, FARVO
Laszlo Z. Bito, PhD

Janet C. Blanks, PhD, FARVO

Jeffrey H. Boatright, PhD, FARVO

William J. Brunken, PhD, FARVO
and Dale D. Hunter, PhD, JD

Claude F. Burgoyne, MD, FARVO
and Vicki Smith

Patrick Burke, MD, PhD

R. V. Paul Chan, MD and
Ann-Marie Lobo-Chan, MD

Stanley Chang, MD, FARVO

Steve T. Charles, MD, FACS, FICS

Emily Y. Chew, MD, FARVO and
Robert P. Murphy, MD

Michael F. Chiang, MD

Thomas A. Ciulla, MD, MBA

Bruce E. Cohan, MD

Lancey B. Cowan, JD, CAE

Cheryl M. Craft, PhD, FARVO

Patricia A. D'Amore, MBA, PhD,
FARVO

Reza Dana, MD, MPH, MSc,
FARVO

Paulus T. V. M. de Jong, MD, PhD,
FARVO, FEBOphth, FRCOphth
and Marij de Jong

John E. Dowling, PhD, FARVO
and Judith F. Dowling

Joseph L. Dowling, MD

Melinda K. Duncan, PhD, FARVO

David L. Epstein*, MD, FARVO
and Susan M. Epstein, RN, JD

Rafal Farjo, PhD and Krysten M.
Farjo, PhD

Paul T. Finger, MD

Malinda E. C. Fitzgerald, PhD,
FARVO

Steven J. Fliesler, PhD, FARVO

Robert N. Frank, MD, FARVO

Ronald E. P. Frenkel, MD

Juan E. Gallo, MD, PhD, FARVO

Ronnie Glaser and Bert M.
Glaser*, MD, FARVO

Israel A. Goldberg, PhD and
Diane Goldberg

Evangelos S. Gragoudas, MD,
FARVO

Hans E. Grossniklaus, MD,
FARVO and Daurice A.
Grossniklaus, PhD

Julia A. Haller, MD, FARVO and
John D. Gottsch, MD, FARVO

Mary Elizabeth Hartnett, MD,
FARVO

2022 Dowling Society inductee

* Deceased

Linda D. Hazlett, PhD, FARVO
 John R. Heckenlively, MD, FARVO
 John A. Hoepner, MD

Donald C. Hood, PhD, FARVO

David Huang, MD, PhD, FARVO
 Leslie Hyman, PhD
 Martine J. Jager, MD, PhD, FARVO
 Murray A. Johnstone, MD, and
 Jeanie Johnstone

Dimitrios Karamichos, PhD
 Paul L. Kaufman, MD, FARVO and
 Margaret Kaufman

John L. Keltner, MD and
 Nancy Keltner

Shigeru Kinoshita MD, PhD,
 FARVO

Renu A. Kowluru, PhD, FARVO
 and Anjan Kowluru, PhD

Ingrid Kreissig, MD

**Alan M. Laties, MD, FARVO* and
 Deena Gu**

David Laties

Paul P. Lee, MD, JD, FARVO and
 Jennifer Lee

Maureen G. Maguire, PhD, FARVO

Todd P. Margolis, MD, PhD

Marmor Foundation/Michael F.
 Marmor, MD, FARVO

Alice R. McPherson, MD

Jennifer J. Kang-Mieler, PhD,
 FARVO and William F. Mieler,
 MD, FARVO

Ann H. Milam, PhD, FARVO

Joan W. Miller, MD, FARVO

Robert F. Miller*, MD, FARVO

Sayoko Eileen Moroi, MD PhD

Alan R. Morse, PhD

Janice Oliva

Samir C. Patel, MD

Christopher A. Paterson*, PhD,
 DSc, FARVO

David R. Pepperberg*, PhD,
 FARVO and Audrey Eisenmann

J. Mark Petrash, PhD, FARVO and
 Kelly Cope Petrash

Stephen C. Pflugfelder, MD,
 FARVO

Robert Ritch, MD, FARVO

Stella M. Robertson, PhD, FARVO
 and James D. Robertson, PhD

Frances J. Rucker, PhD, MCOptom
 Iris M. Rush, CAE

Stephen J. Ryan*, Jr., MD, FARVO
 Srinivas R. Sadda, MD, FARVO

David E. Saffer

Jose Alain Sahel, Jr., MD, FARVO

Joel S. Schuman, MD, FARVO and
 Carole Miner Schuman

Lawrence J. Singerman, MD, FACS

Gregory L. Skuta, MD

Alfred Sommer, MD, MHS

Richard F. Spaide, MD, FARVO

William Eric Sponsel, MD, FARVO

W. Daniel Stamer, PhD, FARVO
 and Catherine Bowes Rickman,
 PhD, FARVO

Mary Ann Stepp, PhD, FARVO

Michael E. Stern, PhD, FARVO

Paul Sternberg, Jr., MD, FARVO
 and Gloria Sternberg

Michael Trese, MD, FARVO

Joyce Tombran-Tink, PhD, FARVO
 and Colin J. Barnstable, DPhil,
 FARVO

Carol B. Toris, PhD, FARVO

Cynthia Toth, MD, FARVO

**Kazuo Tsubota, MD, PhD, MBA,
 FARVO**

Erik J. van Kuijk, MD, PhD, FARVO
 and Virginia Brooke, RN, PhD

Sheila K. West, PhD, FARVO

Janey L. Wiggs, MD, PhD, FARVO
 and Robert J. D'Amato, MD,
 PhD, FARVO

David R. Williams, PhD, FARVO
 and Inger M. Williams, PhD

George A. Williams, MD, FARVO

Terri L. Young, MD, MBA, FARVO

Thomas Yorio, PhD, FARVO and
 Elena Yorio

**To become a member of the Dowling Society, please contact
 the ARVO Foundation for Eye Research at +1.240.221.2950 or
 via email at info@arvofoundation.org**



The new Legacy Society for Planned Giving provides an opportunity for individuals to continue to advance research far beyond their career journey. Consider being part of this exciting opportunity by including a generous gift to the ARVO Foundation in your financial and estate planning. Your gifts, large or small, are critical to our mission.

Inaugural Members

Israella Bash*

Claude F. Burgoyne, MD, FARVO and Vicki Smith

Emily Y. Chew, MD, FARVO and Robert P. Murphy, MD

Cheryl Mae Craft, PhD, FARVO

David L. Epstein*, MD, FARVO and

Susan M. Epstein, RN, JD

Jennifer J. Kang-Mieler, PhD, FARVO and

William F. Mieler, MD, FARVO

J. Mark Petrash, PhD, FARVO and Kelly Cope Petrash

Stella M. Robertson, PhD, FARVO and

James D. Robertson, PhD

Joel S. Schuman, MD, FARVO and Carole Miner Schuman

*deceased

To become a member of the Legacy Society, please contact the ARVO Foundation for Eye Research at +1.240.221.2950 or via email at info@arvofoundation.org

Shuttle Service: Hotels – Convention Center

ARVO is providing complimentary shuttle service that will be making continuous loops from each dedicated hotel route to the convention center.

Shuttle hours

■ Sat., April 22	6:30am–6:30pm
■ Sun., April 23	6:30am–7:30pm
■ Mon., April 24	6:30am–8:30pm
■ Tues., April 25	6:30am–8pm
■ Wed., April 26	6:30am–7:30pm
■ Thurs., April 27	6:30am–6pm

Midday service (10am-4pm) leaves the convention center on the hour.

Route 1

Shuttle pick up: Bourbon St. and Canal St.

Serving:

- Courtyard Iberville
- Renaissance Pere Marquette
- Four Points by Sheraton
- Aloft New Orleans Downtown

Route 2

Shuttle pick up: Sheraton at Canal St. and Camp St.

Serving:

- Sheraton New Orleans Hotel
- New Orleans Marriott Hotel
- Courtyard by Marriott New Orleans Downtown
- Hampton Inn & Suites Downtown
- JW Marriott Hotel New Orleans

Shuttles pick up and drop off attendees at the Transportation Hub across from Hall G at the Convention Center.

Consult the NextBus app via the ARVO mobile app for real-time shuttle information.



ARVO

2024

May 5 – 9 | Seattle
Vision for the Future

Reserve your ARVO 2024 hotel online before you go home!

Hotel reservations for ARVO 2024 in Seattle open on Mon., April 24.

All attendees are encouraged to book their hotel for the 2024 Annual Meeting before heading home.

Two ways to book:

- Stop by the Visit Seattle Booth in ARVO Central
- Reserve online at **ARVO.org/Hotels**

Hotels are available in all price ranges and service levels, and your favorite hotel brands are represented. Official hotels are within a 15-minute walk of the Washington State Convention Center.

Please note: ARVO cannot assume responsibility for rooms reserved at hotels outside the ARVO block (either at hotels not listed or booked directly with the hotels). Special requests (i.e., king-size bed, non-smoking) may be noted but cannot be guaranteed. If you require accessible accommodations, contact ARVO's Housing Bureau with details.

[ARVO.org/Hotels](https://arvo.org/hotels)



Your gift brings young researchers to ARVO 2024



Donate today. I'll match your gift!

Your generous gift today will support travel awards for young scientists to attend ARVO's next meeting in Seattle.

— Don Hood, PhD, FARVO

Ways to give

- In ARVO Central in the Exhibit Hall
- ARVOFoundation.org/Donate
- Scan the QR code and donate

ARVOFoundation.org



ARVO and the ARVO Foundation are grateful to the supporters of the following named awards and grants:

Travel grants supporters:

- Alan Laties, MD, Memorial Travel Grant
- American Macular Degeneration Foundation Travel Grants
- American Uveitis Society Travel Grant
- ARVO Foundation Travel Grants
- ARVO Staff Travel Grant
- Elizabeth Anderson Travel Grants
- Joanne G. Angle Travel Grants
- Grant Wood Balkema Memorial Travel Grant
- Robert B. Barlow, Jr., Memorial Travel Grant
- Roger Beuerman, PhD, Memorial Travel Grant
- IRCCS-Fondazione G. B. Bietti per lo Studio e la Ricerca in Oftalmologia – ONLUS Travel Grants
- BrightFocus Foundation Travel Grants
- Sek-Jin Chew Travel Grant
- Ramon F. Dacheux II Memorial Travel Grant
- M. Velma Dobson Memorial Travel Grant
- Eye Research Center Travel Grant
- Qais Farjo, MD Memorial Travel Grants
- Foster Ocular Immunology Society Travel Grants
- G. M. Jager Memorial Travel Grant
- Murray and Jeanie Johnstone Travel Grant
- Karamichos/Utheim Keratoconus Travel Grant
- Knights Templar Eye Foundation Travel Grants
- Kowa Travel Grant
- Piyush and Sarla Kothary Memorial Travel Grant
- Kreissig Travel Grant
- Lens and Cataract Travel Grant
- Lincoff and Kreissig Minimal Surgery Travel Grant
- Lions Eye Institute for Transplant and Research Travel Grants
- Connie Lee Lerea Travel Grant
- Friederike Mackensen Travel Grant
- Richard Newton Lolley Travel Grant
- Robert F. Miller, MD, Memorial Travel Grant
- National Eye Institute Travel Grants*
- NIHR Moorfields Biomedical Research Centre Travel Grants
- OCAVER Travel Grant
- David R. Pepperberg Memorial Travel Grants
- Retina Research Foundation/Joseph M. and Eula C. Lawrence Travel Grants
- Kazuo Tsubota, MD, PhD Innovation Travel Grant
- Societa Italiana Laser in Oftalmologia Travel Grants
- Striatech Travel Grant
- Josh Wallman Memorial Travel Grant
- Women in Eye and Vision Research (WEAVR) Travel Grants
- Gerhard Zinser Memorial Travel Grant

* Funding of grants for attendance at this conference was made possible in part by grant 2U13EY002143-40 from NEI. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the DHHS, nor does mention by trade names, commercial practices or organization imply endorsement by the U.S. Government.

ARVO Foundation awards & fellowships

- *ARVO Foundation for Eye Research*
ARVO Foundation Early Career Clinician-Scientist Research Awards
- *Anonymous*
Ludwig von Sallmann Clinician-Scientist Award
- *ARVO Foundation for Eye Research*
Collaborative Research Fellowships
- *ARVO Foundation for Eye Research*
Publication Financial Assistance Program
- *The Family of Dr. David L. Epstein*
Dr. David L. Epstein Award
- *Genentech*
Genentech Career Development Award for Underrepresented Minority Emerging Vision Scientists
- *The Family of Dr. Bert M. Glaser*
Bert M. Glaser, MD Award for Innovative Research in Retina
- *Ingrid Kreissig, MD*
Kreissig Award for Excellence in Retinal Surgery
- *The Lighthouse Guild*
Oberdorfer Award for Low Vision Research
- *Pfizer Ophthalmics*
Carl Camras Translational Research Awards
- *Point of View Foundation*
(Fundació Punt de Vista)
Point of View Award

ARVO Foundation Developing Country Eye Researcher Travel Fellowships

- ARVO Foundation Annual Meeting donors
- J. Mark Petrash, PhD, FARVO and family
- University of Wisconsin — Madison
- Women in Eye and Vision Research (WEAVR)
- Satish K. Srivastav Memorial Fellowship

ARVO 2023

Annual Meeting Supporters

The **Association for Research in Vision and Ophthalmology** gratefully acknowledges corporate support for ARVO 2023 Annual Meeting programs and events.

Genentech
A Member of the Roche Group

REGENERON

Alcon

 **EyeCRO**

 **4DMT**

Ora

 **VO-CRO**
Vanderbilt Ophthalmic
Contract Research Organization

 **OCULAR**
CLINICAL RESEARCH
— COMPANY —

 **Théa**

Janssen 

 **iris**
PHARMA

Please note, this is not a complete list of ARVO 2023 sponsors



VABYSMO
faricimab-svoa injection 6 mg

DISCOVER 2 YEARS OF DATA AT

Genentech Booth #1309



Image not intended to be a patient portrayal.

VABYSMO is a registered trademark of Genentech, Inc., and the VABYSMO logo is a trademark of Genentech, Inc. ©2023 Genentech, Inc., 1 DNA Way, South San Francisco, CA 94080-4990. All rights reserved.
M-US-00018913(v2.0) 02/23

Genentech
A Member of the Roche Group