



# 2016

YEAR IN REVIEW



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"We are well prepared to continue  
our growth and success and to  
meet any challenge."



"The ultimate success of our mission, worldwide sight restoration, is evident in the record number of corneal transplants performed last year with tissue supplied by member banks."

- David Glasser, MD

# CHAIR'S ADDRESS

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**David Glasser, MD**

Chair 2014-2016

The past year has been one of success and growth for the EBAA. The organization has made progress on each of the strategic planning goals set last year: member value, physician and medical director engagement, organization strength, innovation, and advocacy.

EBAA members, both eye bankers and physicians, have been key to this success. Graduates of our Physician Leadership Program have assumed positions of responsibility and leadership on a variety of committees. The EBAA took over publication of the International Journal of Eye Banking (IJEB), which has thrived under the leadership of Ellen Heck as Editor.

The ultimate success of our mission, worldwide sight restoration, is evident in the record number of corneal transplants performed last year with tissue supplied by member banks. In addition to an overall growth in volume, the amount of tissue supplied for Descemet membrane endothelial keratoplasty (DMEK) increased 64% over last year. With faster visual recovery and a lower risk of rejection, DMEK is the latest advance in the technology of corneal transplantation. Close cooperation between eye bankers and corneal surgeons has made this possible.

The EBAA's Medical Advisory Board (MAB), under the leadership of Michael Nordlund, M.D., Ph.D, has once again demonstrated an ability to respond rapidly when necessary and with careful and thorough consideration when appropriate to emerging threats of disease transmission. Details are available in the MAB Alerts and in an upcoming issue of the IJEB.

Behind the scenes, EBAA management and staff coordinate and focus our members' collaborative efforts. Kevin Corcoran and Molly Georgakis have developed a number of innovative new member services. Jennifer DeMatteo has done yeoman's work with data from the Online Adverse Reaction Reporting System, allowing the Medical Advisory Board's fungal infection subcommittee to shine a light on the factors associated with the transmission of Candida. Tom Bruderle has been spearheading our advocacy efforts. Medicare has confirmed that the "pass-through" for corneal tissue payment for corneal transplantation will be continued in 2017. Stacey Gardner has kept educational resources fresh and up to date and Bernie Dellario makes sure the bills are paid. Our newest staffers, Yolanda Raine and Genevieve Casaceli, keep us informed and on track.

Looking forward, the EBAA is in good hands with Donna Drury and her new Board at the helm. We are well prepared to continue our growth and success and to meet any challenge.





“While focusing on and planning for new challenges is of utmost importance, it is also important to celebrate our successes. Eye banks and physicians continue to innovate and improve visual outcomes for thousands of individuals each year.”

– Donna Drury, MBA, CEBT, CTBS

# CHAIR'S ADDRESS

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**Donna Drury, MBA, CEBT, CTBS**

Chair 2016-2018

Eye banking continues to evolve and the last half of 2016 brought significant changes to our profession. Changes in supply and demand and the entry of the for-profit sector to our profession appear to be amplifying the level of competition between eye banks. While competition can be frustrating and time-consuming, it also drives innovation and forces a model of continuous improvement. The challenges for EBAA and its members are many, including maintaining a collaborative culture within our association and protecting the uniqueness of eye banking, which is driven by mission rather than by money. We must work together to prevent ocular tissue from being treated as a commodity and constantly remind others, both internal and external to our organizations, that it is a precious gift from one person to another.

EBAA continues to support our eye banks and our physicians through initiatives derived from our strategic plan. Two of our strategic drivers are specifically designed for this purpose:

- Developing and delivering innovative, high-value, timely solutions that support members' evolving professional development and business needs;
- Fostering collaboration and leveraging the knowledge base of our physician community to advance eye banking and corneal transplantation.

As I write this, we're well underway with planning our Eye Banker Leadership Forum and Physicians Leadership Program, which will be held in February 2017. These programs will focus on how to adapt to, implement and benefit from change through teamwork, leadership, and inspiration.

While focusing on and planning for new challenges is of utmost importance, it is also important to celebrate our successes. Eye banks and physicians continue to innovate and improve visual outcomes for thousands of individuals each year.

As we move forward, EBAA will continue our work in setting standards, providing education and engaging in advocacy to support our eye banks and physicians as they work in partnership to restore sight and eliminate corneal blindness worldwide.







“Individuals, organizations, professions - all grow through change. Stasis is rarely the best course of action, if it’s even a possibility. So it is for EBAA; we have initiated and adapted to countless changes in our 55-year history, a pattern I don’t expect will change in the foreseeable future.”

- Kevin P. Corcoran, CAE

# PRESIDENT'S LETTER

Kevin P. Corcoran, CAE

## Ch-ch-ch-changes

Individuals, organizations, professions – all grow through change. Stasis is rarely the best course of action, if it's even a possibility. So it is for EBAA; we have initiated and adapted to countless changes in our 55-year history, a pattern I don't expect will change in the foreseeable future. But that's to be expected in a profession that is predicated on change – the generous gift of eye, organ, and tissue donation at the end of one individual's life can transform the lives of the gifts' recipients, giving them opportunities and experiences that would have been impossible otherwise.

Here are just a few of the changes EBAA is undertaken recently:

- On December 21, we moved into new office space when our previous lease expired. While our new home is just three blocks from our previous office, it represents a significant upgrade in functionality. Because we started with a blank slate, the new office includes design elements that reflect EBAA's mission to restore sight. We've placed a heavy emphasis on the use of light and open space; with lots of glass, both to draw light from the outside and within the suite itself. The walls in our entry foyer are curved to resemble the shape of the cornea, as are the pendant lights.

Our new office not only reflects our members' work, it displays it proudly. We invited every EBAA member to submit photos or objects from their eye bank for display in the suite, so each of them can be represented in the office. Eye banking artifacts, such as instruments, recovery thermoses, plaques and awards, are presented in a display case in the foyer.

- The profession's accelerating pace of change makes it imperative that that association remain flexible. The strategic plan we adopted in 2015 anticipated this need and proposed a thorough review of EBAA's governance structure. A committee formed in February 2016 worked through the year to recommend changes to our Board of Directors and House of Delegates that will enhance these bodies' strategic orientation. The Board will meet in February 2017 to discuss this proposal, and

their recommendations, including possible bylaws amendments, will be considered in the House of Delegates in June.

- As the association has changed, our staff has evolved to meet our new needs and opportunities. As a result, we've added two new staff since our last report:
  - Genevieve Casaceli joined us in April as our Meetings and Education Coordinator, just as she was completing her Master's Degree in Organizational Development and Leadership. She brings a special passion to her work since her father was a cornea donor.
  - Yolanda Raine, our most recent addition, came to us in November from Children's National Health System to serve as our Communications Manager. Her experience is helping us take a more proactive and polished approach to our communications efforts.
- Finally, members with good memories will recognize that our Year in Review document used to be synced with our fiscal year, which ends on June 30 – this is the first issue that reflects the calendar year. We've made this change because it better represents the way members and staff think about "the year" and gives a better snapshot of our activity over a given period.

None of these changes, or the myriad others that we've made, were undertaken without consideration of how they might affect the association, our members, and our profession. As you review this entire report, I invite you to contact me or any Board or staff member if you have questions, suggestions or insights that will allow us to fulfill our mission and support our members in the restoration of sight.



# THROUGH MY EYES CONTEST

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## Art Contest Winners

EBAA sponsored its third annual "Through My Eyes" Art Contest during National Eye Donor Month 2016. Many stories, photographs, drawings, and videos were submitted; one submission per category was chosen to highlight via EBAA media.



### Drawing/Painting

**Sydney Alderman, Cornea Recipient**

Quote:

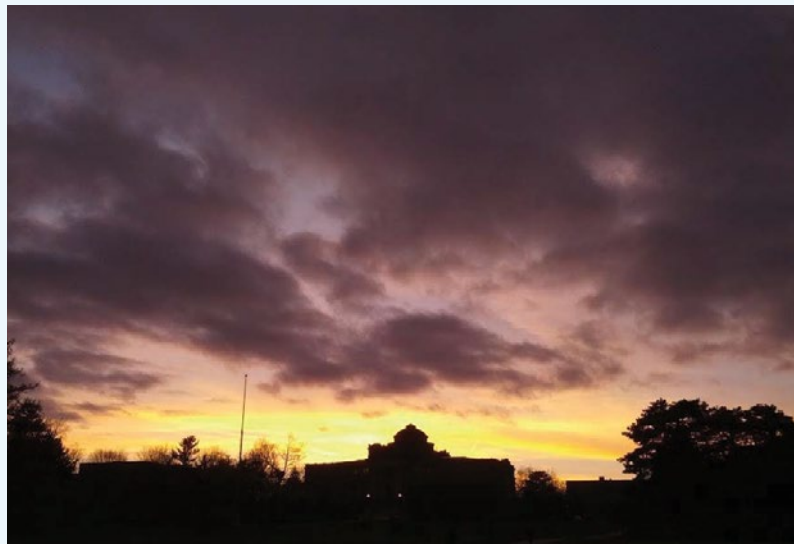
"By receiving this cornea, I see the world in a whole new way..."

### Photograph

**Submitted by: Jana Higgins Taylor, Donor Wife**

**Taken by: Joel Higgins, Eye Donor**

The photograph, titled "Sunset on Campus," became a favorite to both Joel and Janae because every sunset brings the promise of a new day and new hope.





### Written Composition

**Ashley Power, Donor Mother**

Quote:

"His name was Jake...I had the honor of being his mother for eight years. He is forever one of my greatest accomplishments...Having the knowledge of others being able to see what a beautiful world we live in thru the eyes of an Angel that briefly walked this earth, comforts my soul."



### Video

**Becky Howard, Mother of Cornea Recipient, Gentry Howard**

Quote:

"Gentry came into the world completely blind. Born with congenital glaucoma and a protruding left cornea, Gentry had her first eye surgery when she was just two days old and received her first cornea transplant at one month to reconstruct her left eye and correct corneal cloudiness. Today at the age of four, she's overcome more than 20 separate surgeries and five cornea transplants, including a prosthesis."



To view these entries in their entirety, please visit  
<http://www.restoresight.org> and search for "Through My Eyes Art Contest."

For more highlights from National Eye Donor Month, see page 23.



EBAA champions the restoration of sight through core services to its members which advance donation, transplantation, and research in their communities throughout the world.

Photo courtesy of Eversight Michigan

# THE ASSOCIATION AT WORK

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## Legislative Advocacy

### CMS Maintains Medicare Pass-Through for 2017

CMS formally ruled that Medicare will continue to designate corneal tissue acquisition as contractor-priced based on the invoiced costs of acquiring corneal tissue for corneal transplant procedures. However, CMS will continue its policy to limit separate payment for corneal tissue acquisition costs in the hospital outpatient department and ASC to only corneal tissue that is used in a corneal transplant procedure. They will make packaged payment for all tissues used for patch grafts in glaucoma shunt surgeries.

In March of 2015, CMS revised its reimbursement policies to extend the pass-through to corneal tissue used for glaucoma shunt graft procedures performed in ambulatory surgery centers. This policy was widely hailed within the eye banking and ophthalmic communities. However, CMS reversed this policy for CY 2016. EBAA submitted [comments](#) to CMS challenging the rationale behind its proposed reversal and urging the agency to reconsider its decision.

## Regulatory Advocacy

### EBAA Submits Comments to FDA Guidance Regarding Use of HBV NAT

EBAA submitted comments to the guidance document entitled "[Use of Nucleic Acid Tests to Reduce the Risk of Transmission of Hepatitis B Virus from Donors of Human Cells, Tissues, and Cellular and Tissue-Based Products](#)," dated January 2016. The draft guidance provides establishments that make donor eligibility determinations for donors of human cells, tissues, and cellular and tissue-based products (HCT/Ps) with recommendations concerning the use of FDA-licensed nucleic acid tests (NAT) in donor testing for hepatitis B virus (HBV) DNA.

The EBAA supports the requirement that HCT/P donors be tested for HBV using an FDA-licensed NAT donor screening test, in addition to testing for HBsAg and for total anti-HBc (IgM and IgG). We concur that NAT testing is necessary to detect viral infection during the infectious window period or breakthrough infections in previously vaccinated individuals.

### EBAA Submits Comments on HCT/P Deviation Reporting Guidance

EBAA submitted comments to the FDA on the draft guidance document entitled "[Deviation Reporting for Human Cells, Tissues, and Cellular and Tissue-Based Products Regulated Solely Under Section 361 of the Public Health Service Act and 21 CFR 1271](#)."

EBAA's comments request clarification that a deviation that relates to the potential communicable disease transmission is only reportable to FDA if it involves a relevant communicable disease or disease agent (RCDAD). We also requested further clarification regarding distribution deviation for positive pre-sterilization/pre-disinfection culture reports from tissue partners, when the results would not change the eligibility determination if known prior to tissue release.

We applaud the FDA for providing scenarios to illustrate who must investigate and report an HCT/P deviation, what must be reported, and when such reports must be submitted to the FDA.

To view EBAA's comments on the guidance, [click here](#).



# THE ASSOCIATION AT WORK *(continued)*

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## FDA Issues New Guidance on Preventing Zika Virus Transmission through Donated Cells and Tissues

FDA released new guidance for immediate implementation providing recommendations to reduce the potential transmission risk of Zika virus from human cells, tissues, and cellular and tissue-based products (HCT/Ps). The guidance addresses donation of HCT/Ps from both living and deceased donors, including donors of umbilical cord blood, placenta, or other gestational tissues.

Recommendations for deceased (non-heart-beating) donors: Donors should be considered ineligible if they were diagnosed with Zika virus infection in the past six months.

A deferral period of six months was chosen because of the limited data available on the length of time the virus can persist in all tissues. Zika virus has been detected in tissues and body fluids after the virus is no longer detectable in blood, and has been detected in semen possibly up to 10 weeks after the onset of symptoms. Given the uncertainty, six months was determined to provide the appropriate level of caution.

Less evidence exists regarding the potential for transmission of Zika virus by HCT/Ps typically recovered from deceased donors. As more information becomes available, the understanding of the risks to recipients of HCT/Ps, including HCT/Ps recovered from deceased donors, may evolve. The FDA will continue to monitor the situation, and will carefully evaluate new information regarding the associated risks as it becomes available.

## FDA: Donor Screening Recommendations to Reduce the Risk of Transmission of Zika Virus by Human Cells, Tissues, and Cellular and Tissue-based Products

## EBAA Releases DRAI Addendum to Assist with Screening for Risk of Zika Virus Infection

The DRAI Stakeholder Review Group, with representatives from AATB, AOPO, and EBAA, released the [Zika Virus \(ZIKV\) Infection Addendum](#) on March 14, 2016, to assist with screening donors for risk of Zika virus (ZIKV) infection.

The addendum and relevant flowcharts are available for use with any of the three Uniform Donor Risk Assessment Interview (DRAI) forms, and they are adaptable for use with any DRAI form style.

These tools assist with developing policies and procedures to screen a deceased donor of organs, tissues or eyes for risk of infection with ZIKV.

## FDA Releases Final Syphilis Guidance

The FDA released the final guidance document entitled ["Use of Donor Screening Tests to Test Donors of Human Cells, Tissues and Cellular and Tissue-Based Products for Infection with \*Treponema pallidum\* \(Syphilis\); Guidance for Industry"](#) dated September 2015.

The guidance provides HCT/P Establishments with updated recommendations concerning donor testing for evidence of *Treponema pallidum* infection and clarifies that they must use appropriate FDA-licensed, approved, or cleared donor screening tests.

1. FDA no longer intends to exercise enforcement discretion with respect to the use of diagnostic tests for evidence of infection with *T. pallidum* for use as HCT/P donor screening tests. The FDA will enforce the requirements provided under § 1271.80(c) that establishments must use appropriate FDA-licensed, approved, or cleared donor screening tests in accordance with the manufacturer's instructions to adequately and appropriately reduce the risk of transmission of disease agents such as *T. pallidum*.
2. Pre-amendments devices are not acceptable for use as a donor screening test for evidence of infection with *T. pallidum*.
3. This guidance applies to all HCT/Ps recovered after the implementation date of this guidance.

FDA recommends that HCT/P Establishments implement the recommendations in this guidance as soon as feasible, but not later than 6 months after issuance of this guidance.

## THE ASSOCIATION AT WORK *(continued)*

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### FDA Releases Final Guidance on Investigating and Reporting Adverse Reactions

The FDA released the final guidance document entitled *"Investigating and Reporting Adverse Reactions Related to Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps) Regulated Solely under Section 361 of the Public Health Service Act and 21 CFR Part 1271"* dated March 8, 2014.

The guidance provides tissue establishments with recommendations for complying with the requirements of 21 CFR Part 1271 for investigation and reporting of complaints and adverse reactions involving communicable disease in recipients of 361 HCT/Ps. In addition, this guidance provides updated instructions for completing the MedWatch mandatory reporting form, Form FDA 3500A.

This guidance finalizes the draft guidance of the same title dated February 2015.

This guidance supplements section XXII of the "Guidance for Industry: Current Good Tissue Practice (CGTP) and Additional Requirements for Manufacturers of Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps)" dated December 2011, by providing additional recommendations specific to eye bank responsibilities to investigate complaints of adverse reactions concerning 361 HCT/Ps under 21 CFR 1271.160(b)(2), 21 CFR 1271.320 and 21 CFR 1271.350(a).

In addition, this guidance supersedes the FDA guidance entitled "Guidance for Industry: MedWatch Form FDA 3500A: Mandatory Reporting of Adverse Reactions Related to Human Cells, Tissues, and Cellular and Tissue-Based Products (HCT/Ps)" dated November 2005.

### FDA Releases Draft Guidance for Industry: Homologous Use of Human Cells, Tissues, and Cellular and Tissue-Based Products

The FDA has released a new **draft guidance** document entitled "Homologous Use of Human Cells, Tissues, and Cellular and Tissue-Based Products" dated October 2015. The guidance provides tissue establishments with the definition of homologous use and how to apply the regulatory criterion to their HCT/Ps.

Homologous use means the repair, reconstruction, replacement, or supplementation of a recipient's cells or tissues with an HCT/P that performs the same basic function or functions in the recipient as in the donor (21 CFR 1271.3(c)), including when such cells or tissues are for autologous use. FDA considers an HCT/P to be for homologous use when it is used to repair, reconstruct, replace, or supplement:

- Recipient cells or tissues that are identical (e.g., skin for skin) to the donor cells or tissues, and perform one or more of the same basic functions in the recipient as the cells or tissues performed in the donor; or,
- Recipient cells that may not be identical to the donor's cells, or recipient tissues that may not be identical to the donor's tissues, but that perform one or more of the same basic functions in the recipient as the cells or tissues performed in the donor.

The FDA then provided examples of the basic function of different HCT/Ps and clarified that a corneal graft is considered homologous use.

*The basic functions of the cornea include protecting the eye by forming its outermost layer and serving as the refracting medium of the eye. A corneal graft is transplanted to restore sight in a patient with corneal blindness. This is homologous use because a corneal graft performs the same basic functions in the donor as in the recipient.*





We applaud the reversal of FDA's deferral for receipt of human-derived clotting factor concentrates following the EBAA request that this risk criterion should also be removed from the Final Guidance used for screening HCT/P donors.

Photo courtesy of Mid-America Transplant

# THE ASSOCIATION AT WORK *(continued)*

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## EBAA Submits Comments on Recommendations for Reducing the Risk of HIV Transmission by Blood Products

EBAA submitted comments to the FDA on the draft guidance document entitled “Revised Recommendations for Reducing the Risk of Human Immunodeficiency Virus Transmission by Blood and Blood Products,” dated May 2015. The draft guidance document is intended to provide blood establishments with revised donor deferral recommendations for individuals with increased risk for transmitting HIV infection. The draft guidance, when finalized, will supersede the 1992 blood memorandum, entitled Revised Recommendations for the Prevention of Human Immunodeficiency Virus (HIV) Transmission by Blood and Blood Products, dated April 23, 1992.

EBAA’s comments support the recommendation to change the indefinite deferral of men who have sex with men, or MSM, to a 12-month deferral. This change in policy would align the donor deferral period for MSM with criteria for other sexual behaviors that may pose a similar risk of transfusion-transmissible infections. We request clarification of the deferral period for female donors with a history of sex with a man who had sex with another man.

We applaud the reversal of FDA’s deferral for receipt of human-derived clotting factor concentrates because of HIV or hepatitis risk, but acknowledge the safety risk for persons with hemophilia or receipt of clotting factor concentrates due to the use of large bore needles during blood donation. Without evidence of any relevant references to support that there is increased risk associated with receipt of human-derived clotting factor concentrates, the EBAA requested that this risk criterion should also be removed from the Final Guidance used for screening HCT/P donors.

EBAA also recommends that FDA shorten the deferral period for commercial sex workers (CSW) and injection drug use (IDU) to 5 years, consistent with the deferral period for HCT/P donors.

To view EBAA’s comments on the guidance, [click here](#).

## Florida HTLV Waiver Approved

EBAA submitted a petition for a variance or a waiver from Rule 59A-1.005(35)(a)2, Florida Administrative Code seeking relief from the requirement to test all tissue donors using an “FDA-licensed HTLV test” on behalf of seventeen EBAA-member eye banks currently licensed in the State of Florida.

The State of Florida, Agency for Health Care Administration issued a Final Order on October 14, 2016, granting a temporary waiver from Rule 59A-1.005(35)(a)2, Florida Administrative Code, relating to HTLV testing for a period expiring on October 1, 2018.

## HHS Releases TODES Final Report

The Tissue and Organ Donor Epidemiology Study (TODES) was designed to identify and collect information on deceased persons referred for organ, tissue and eye donation, and to estimate infectious disease prevalence and incidence of HIV, HBV, and HCV in this population. A total of 21 OPOs and eight eye banks provided data for this study.

The final [report](#) has been submitted to the Office of HIV/AIDS and Infectious Disease Policy, Office of the Assistant Secretary of Health, and U.S. Department of Health and Human Services.

## FDA Releases Revised Guidance on Human-Derived Clotting Factor Concentrates

The FDA released the guidance document entitled “[Revised Recommendations for Determining Eligibility of Donors of Human Cells, Tissues, and Cellular and Tissue-Based Products Who Have Received Human-Derived Clotting Factor Concentrates](#)” dated November 17, 2016, for immediate implementation.

# THE ASSOCIATION AT WORK *(continued)*

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FDA no longer considers the receipt of clotting factor concentrates, or sex with a person who has received clotting factor concentrates, to be a risk factor for HIV, HBV, or HCV. As such, HCT/P donors should not be considered ineligible due to the following conditions, and screening for these conditions is no longer necessary:

1. Persons with hemophilia or other related clotting disorders who have received HDCFCs at any time;
2. Persons who received clotting factors once to treat an acute bleeding event at any time; or
3. Persons who have had sex at any time with either of the persons described above.

These recommendations supersede the recommendations listed in section IV.E.3. of the August 2007 Guidance.

## Recall of Eye Wash/Eye Irrigating Solutions Distributed by Major Pharmaceuticals and Rugby Laboratories

The Medical Advisory Board issued an [Alert](#) on August 24, 2016, regarding contaminated eye irrigation solution. Two eye banks were notified about a cluster of positive surgical cultures growing one or more Gram negative rods – a combination of *Stenotrophomonas maltophilia*, *Burkholderia cepacia*, and *Achromobacter xylosoxidans* (formerly called *Alcaligenes*). All are nosocomial pathogens which proliferate in aquatic environments and have led to product recalls.

The investigation revealed a possible common source contaminant, since all involved use of particular lots of a sterile eye irrigation solution manufactured from Neo Vision Co., Ltd in their Korean plant. The product is distributed as Major Eye Wash from Major Pharmaceuticals, which also DBA Rugby Laboratories, Livonia, MI.

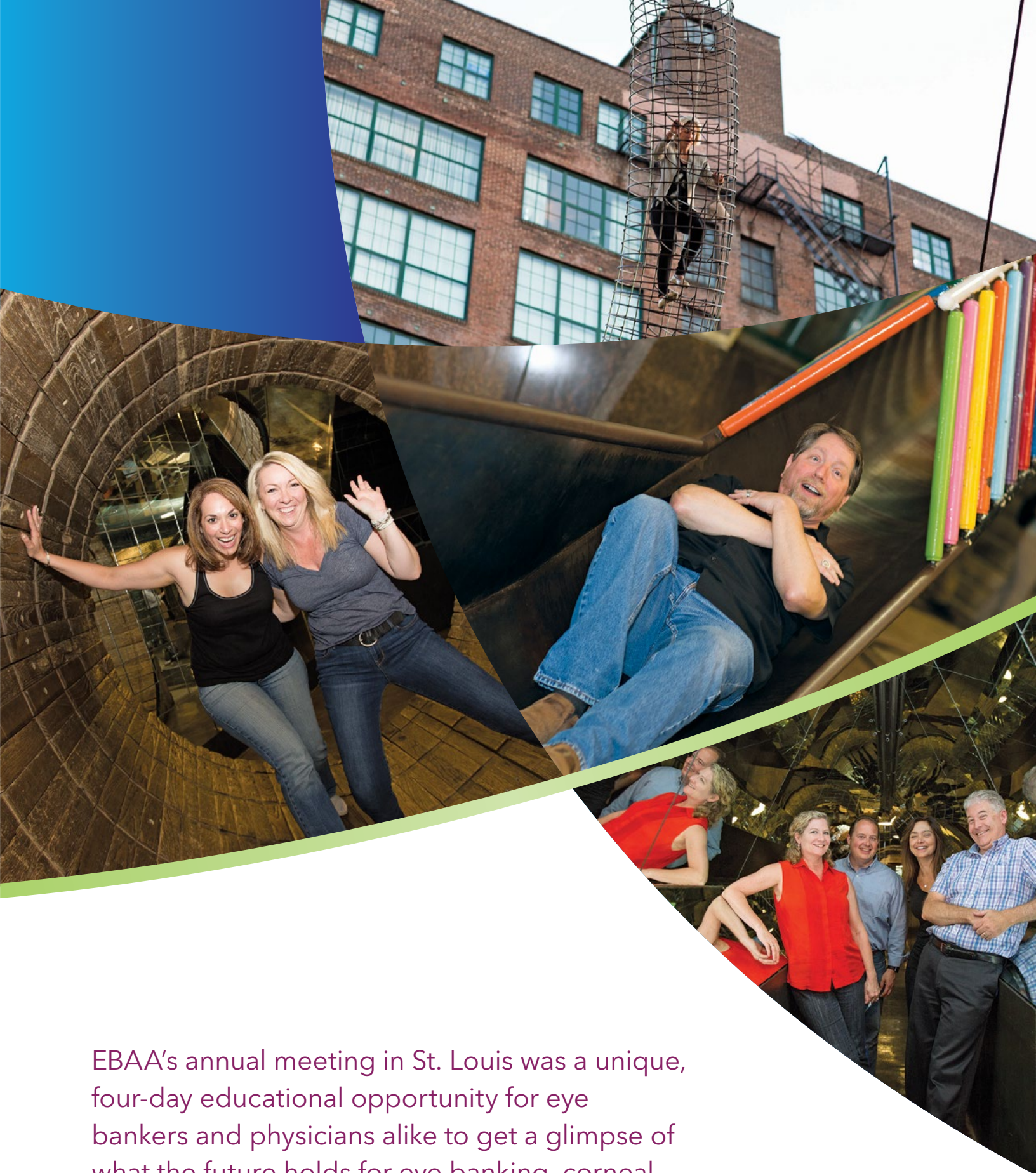
On September 7, 2016, United Exchange Corp. of Cerritos, CA, the primary source vendor of the Rugby-branded Eye Irrigating Solution and Major-branded Eye Wash, issued a [recall](#) due to microbial contamination.

## Medical Review Subcommittee Publishes Seven Years of Adverse Reaction Data

The EBAA Medical Review Subcommittee performed a retrospective review of all adverse reactions reported to the EBAA for corneal transplants performed between January 1, 2007, and December 31, 2014. Their analysis was published in the July 2016 issue of *Cornea*.

Of the 354,930 transplants performed in the United States, adverse reactions were reported in 494 cases (0.139%). Primary graft failure (PGF) was the most commonly reported adverse reaction (n = 319; 0.09%), followed by endophthalmitis (n = 99; 0.028%) and keratitis (n = 66; 0.019%). PGF was disproportionately associated with endothelial keratoplasty (EK). An increasing trend in the rate of endophthalmitis and keratitis was observed, disproportionately associated with EK and *Candida* species.





EBAA's annual meeting in St. Louis was a unique, four-day educational opportunity for eye bankers and physicians alike to get a glimpse of what the future holds for eye banking, corneal transplantation, and research.



# MEETINGS & HAPPENINGS



## 55th EBAA Annual Meeting

EBAA welcomed more than 370 attendees, exhibitors and guests to St. Louis, MO, June 8-11 for the 55th Annual Meeting at the Hilton St. Louis at the Ballpark.

The meeting began Wednesday morning with an Executive Directors Summit hosted by Mid-America Transplant at their facility. Topics covered included *Attracting Top Talent, Engaging a Mission Driven Workforce to Achieve High-Performance Results and Managing Innovations and Intelligent Risks* and featured a variety of presenters.

More than 200 people headed to the City Museum on Wednesday night, where they climbed various structures, slid down 10-story slides, enjoyed a life-sized hamster wheel, explored caves and tunnels and also ate, drank and networked at this one of a kind museum housed in a former shoe factory. Over the next three days, session topics included *Hope and Healing: Bridging the Power of Donation and Vision Research, Vendor/Supplier Qualifications: How to Develop a Compliant and Practical Program, Sepsis: Identification, Trends and Decisions on Donor Eligibility, Recovering Eyes after Face Donation, Navigating Life's Rough Waters: Fostering Self Care and Resilience, Ocular Melanoma: What Medical Directors Need to Know*, and much more.

As the meeting host, Mid-America Transplant provided and recruited various speakers, hosted the Executive



Director Summit, provided a welcome gift for meeting attendees, helped staff the registration desk and supported the meeting in many other ways.

EBAA looks forward to its 56th Annual Meeting, June 14-17, 2017 in Salt Lake City, Utah.

## Fall Symposia

### 2016 Fall Education Symposium

The 2016 Fall Educational Symposium, jointly hosted by the Cornea Society and Eye Bank Association of America, took place on Friday, October 14th, at Westin Michigan Avenue in Chicago, Illinois. The symposium welcomed over 400 attendees, showcased 26 abstracts, 2 lectures and 4 award presentations. The day-long symposium was moderated by Anthony Aldave, MD, and Bennie Jeng, MD, and featured papers by eye bankers, residents, corneal fellows, medical students, and a variety of experts in the field of ophthalmology. The American Society of Cataract and Refractive Surgery designated this live activity for a maximum of 5.75 AMA PRA Category 1 Credits™ and EBAA was proud to fund all costs associated with the provision of continuing medical education (CME) credit for this program.

During the symposium, the 2016 R. Townley Paton Award was awarded to Mark A. Terry, MD, in recognition of his many contributions to eye banking, corneal



## MEETINGS & HAPPENINGS *(continued)*



transplantation and EBAA. After being introduced by Dr. George Rosenwasser as this year's recipient, Dr. Terry, delivered the Paton Lecture, *"The Evolution of Endothelial Keratoplasty: A Personal Journey."*

The R. Townley Paton Award is the Eye Bank Association of America's highest honor for corneal surgeons and is awarded each year to an individual who exemplifies the precepts of R. Townley Paton, MD, the father of modern eye banking.

The Best Paper of Session Award, supported by an unrestricted education grant from SightLife, was presented to Dr. Viridiana Kocaba, from Schepens Eye Research Institute, for her presentation, *"Endothelial Cell-Guttate Interactions: Live Cell Imaging Study."*

### 2015 Fall Educational Symposium

The Fall Educational Symposium, jointly hosted by the Cornea Society and Eye Bank Association, took place on November 13th at Caesars Palace in Las Vegas, Nevada. The symposium welcomed over 400 attendees and showcased 25 abstracts, 2 lectures, and 4 awards presentations. The day-long symposium was moderated by Barry Lee, MD, and Bennie Jeng, MD.

During the symposium, the 2015 R. Townley Paton Award was awarded to George OD Rosenwasser, MD, CEFT, in recognition of his many contributions to eye banking,



corneal transplantation, and EBAA. After being introduced as this year's recipient, Dr. Rosenwasser, gave the Paton Lecture, *"Eye Banking 2015: Where We Came From and Where We're Going."*

The Best Paper of Session Award, sponsored by SightLife, was awarded to Mohit Parekh from Veneto Eye Bank Foundation in Venice, Italy, for his presentation of the paper, "Pre-Loaded Tissues for DMEK". This award is presented annually to recognize the best paper by a resident or corneal fellow and was supported by an unrestricted educational grant from SightLife.

Thank you to all of the invited speakers, award recipients, moderators, selection committee, and attendees for again making this event an annual favorite in the eye banking and ophthalmic communities.



Mari Fridenmaker, cornea recipient and Team Georgia Representative, received Gold and Silver medals in swimming at the 2016 Transplant Games.

Photo courtesy of SightLife

# 2016 TRANSPLANT GAMES OF AMERICA

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## Member Participation in Transplant Games

The Donate Life Transplant Games is a multi-sport festival event produced by the Transplant Games of America for individuals who have undergone life-saving transplant surgeries. This year's games were jointly hosted by Eversight Ohio, the Greater Cleveland Sports Commission, Lifebank, and Transplant Games of America.

Competitive events are open to living donors, organ transplant recipients, bone marrow, corneal and tissue transplant recipients. More than an athletic event, the Donate Life Transplant Games highlight the critical importance of organ, eye, and tissue donation, while celebrating the lives of organ donors and recipients.

Here are just a few highlights the 2016 event:

- Eversight Ohio hosted "Eyes on Cleveland," welcoming cornea recipients, friends and supporters to the Games in Cleveland. They honored a board member for her longtime advocacy of vision, as she received a Legacy

Award for her planned gift to the Cleveland Eye Bank Foundation. Eversight Ohio also premiered a video that highlighted a cornea recipient who received a transplant 25 years ago.

- Team Utah won the overall games.
- Approximately 15 cornea recipients participated in this year's event.
- Scott MacIntyre, past American Idol contestant, and kidney recipient, performed.
- Cameron Whittle, a cornea recipient, won the gold for Team Philly in the 5000 meter. He is affiliated with the Lions Eye Bank of Delaware Valley and recently celebrated his second transplant anniversary.
- Mari Fridenmaker, cornea recipient and Team Georgia Representative, received Gold and Silver medals in swimming.

## New Members

### EBAA Welcomes Two New Members

The EBAA Board of Directors voted to accept two new members - Hornhautbank Munich gGmbH and New England Organ Bank - at its June meeting.

Hornhautbank Munich, which is accredited by the European Eye Bank Association, received letters of support from several EBAA Member eye banks, as well as from local physicians.

Andrea Gareiss-Lok, Hornhautbank Munich Managing Director and CEO, became a Certified Eye Bank Technician (CEBT) in 1993 and recently attended the 56th EBAA

Annual Meeting in St. Louis in June. Hornhautbank Munich joins EBAA as an Associate Unaccredited International Member.

New England Donor Services, which is headquartered in Waltham, MA, is accredited by the American Association of Tissue Banks. New England Donor Services also received letters of support from several EBAA Member eye banks with which it partners, as well as local physician support.

New England Donor Services joins EBAA as an Associate Unaccredited U.S. Member.

# WHAT'S NEW: MELANOMA AND EYE DONATION

Jennifer Li, MD

One of the most important changes to the Eye Bank Association of America (EBAA) Medical Standards in 2016 addresses the use of ocular tissues from donors with a history of metastatic melanoma. In February 2016, the EBAA Medical Advisory Board (MAB) received notification of a potentially life-threatening adverse event of keratolimbal allograft donor-recipient melanoma transmission.<sup>1</sup> The donor had a history of malignant melanoma and the recipient subsequently developed malignant melanoma in the operative eye within two months of surgery.

The MAB met via conference call and voted to put in place a temporary moratorium on ocular tissue from donors with any history of melanoma for any surgical use and on ocular tissue from donors with a history of solid metastatic tumors for surgical use of vascular components. A subcommittee was then tasked to further analyze the risks of tumor transmission via ocular tissue and submit formal recommendations for changes to the Medical Standards to the MAB. Prior to this event, the only oncologic contraindications to transplant in the EBAA Medical Standards were donors with intrinsic eye disease such as retinoblastoma or other malignant tumors of the anterior segment, active leukemias, and active disseminated lymphomas.

After thorough search of the available literature and discussion with experts in the field, the following changes to the Medical Standards were proposed to and ultimately accepted by the MAB:<sup>2</sup>

1. Donors with a history of melanoma with known metastatic disease are contraindicated for all surgical purposes,
2. Donors with a history of melanoma (with or without metastasis) or solid, cancerous, non-melanoma tumor with metastasis, are contraindicated for scleral tissue use (unless donor tissue is irradiated) and keratolimbal allograft procedures.

There were many considerations that led to these final recommendations. One major concern with malignant melanoma is the potential for late disease recurrence. Malignant melanoma has been reported to reoccur as late as thirty-five years after the initial diagnosis and treatment.<sup>3</sup> Patients with all levels of malignant melanoma have been documented to have late recurrences.<sup>4</sup> This suggests that tumor cells can potentially remain undetected in a patient for many years after the initial disease diagnosis and treatment.

Additionally, malignant melanoma is known to metastasize to distant sites including the eye and orbit.<sup>5</sup> Patients with metastatic disease to the eye may present ocular symptoms such as floaters, hazy vision, pain, or proptosis.<sup>6,7</sup> Patients may also be completely asymptomatic with metastatic disease to the eye.<sup>8</sup> Further adding to the concern that ocular disease may be missed in potential donors, malignant melanoma has the potential to spread via micrometastases which are seen by histopathology, but may be both asymptomatic and not visible clinically.<sup>9</sup> Atypical tumor cells positive for melanocytic differentiation marker S100 have been detected in the avascular paracentral cornea, in the sclerocorneal limbus, and in the sclera in a patient with aggressive metastatic cutaneous melanoma.<sup>10</sup>



## WHAT'S NEW: MELANOMA *(continued)*

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Given the potential for asymptomatic micrometastases to ocular tissue and for late recurrences of disease years after treatment, it was felt that the use of ocular tissue from donors with any history of metastatic malignant melanoma would put a recipient at risk of potential donor-to-recipient tumor transmission.

The next concern that the MAB subcommittee addressed was that of ocular donor tissue which may inherently pose a higher risk for donor-to-recipient tumor transmission. The inciting case of donor-recipient melanoma transmission as mentioned previously was a result of keratolimbal allograft tissue. This vascular tissue may have increased risk of tumor transmission compared to avascular corneal tissue. Stricter criteria were felt to be necessary to protect these recipients from inadvertent donor transmission of malignant disease. Therefore, all donors with a history of melanoma (with or without known metastasis) or a solid, cancerous, non-melanoma tumor with known metastasis are contraindicated for use in keratolimbal allograft procedures. Scleral tissue was given the same restrictions because although the tissue is technically avascular, it is in direct contact with the highly vascular choroidal tissue with choroidal vessels penetrating through it. The choroid is one of the most common locations for the spread of metastatic disease to the eye due to its inherent vascularity. Scleral tissue that has been irradiated has been excluded from these restrictions as the irradiation process destroys any live cellular material.

The changes to the EBAA Medical Standards regarding donors with melanoma and solid, cancerous, non-melanoma tumors were made to decrease the risk to donor-recipient tumor transmission without unnecessarily limiting the donor pool to an extreme. Fortunately, these cases of donor-recipient tumor transmission are rare, but as we continue to advocate for the restoration of sight throughout the world, we must also continue to evaluate and improve the safety of ocular tissue regularly. First, do no harm.

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# STRATEGIC PLAN

## Kevin P. Corcoran, CAE

President and CEO

No complex organization can be led effectively if it lacks a consensus about what it hopes to accomplish and a plan to achieve those goals. In 2012, the Eye Bank Association of America (EBAA) Board of Directors developed a strategic plan to carry the association through the next three years. This served us well during a period of evolution within the profession and the association. The approach of 2016 called for a new plan, both because the former plan had reached its expiration date and because the association and its environment had changed significantly over the previous three years.

We first conducted a survey to determine EBAA members' perceptions of our programs and their satisfaction with those programs. We used the same survey tool used in 2012 to help guide the first strategic plan - this allowed us to evaluate if, and how much, we had improved over the previous three years. The results were pleasantly surprising; with significant improvements in all statistical areas (all scores on a 1 to 7 scale with 1 being best and 7 being worst).

Criterion	2012	2015	Change
Importance of EBAA's programs	3.01	2.66	13%
Satisfaction with EBAA's programs	3.26	2.61	26%
EBAA's performance	3.55	2.13	66%
Overall satisfaction with EBAA	3.33	1.82	83%

We then engaged a facilitator to guide us through a re-evaluation of our environment and the challenges and opportunities the profession would be likely to face over the next three years, so we could anticipate and proactively address these issues. This culminated in a weekend-long meeting during which the Board identified five strategic drivers for the good of our members and profession and established goals related to each.

Strategic Driver	Goals
<b>Member Value</b> Develop and deliver innovative, high-value, timely solutions that support members' evolving professional development and business needs	<ul style="list-style-type: none"> <li>• Increase member satisfaction</li> <li>• Strengthen programs, products, and services</li> <li>• Build member community</li> </ul>

Strategic Driver	Goals
<b>Physician &amp; Medical Director Engagement</b> Foster collaboration and leverage the knowledge base of our physician community to advance eye banking and corneal transplantation	<ul style="list-style-type: none"> <li>• Increase information sharing</li> <li>• Build the physician community</li> <li>• Involve young physicians</li> </ul>

Strategic Driver	Goals
<b>Organization Strength</b> Build an organizational structure and the financial resources to support volunteers and staff in fulfilling our mission	<ul style="list-style-type: none"> <li>• Diversify the business model</li> <li>• Strengthen governance</li> </ul>

Strategic Driver	Goals
<b>Strategic Intelligence</b> Identify medical, technical, and business trends/issues that will impact eye banking	<ul style="list-style-type: none"> <li>• Actively scan the environment for medical and technical advances</li> <li>• Look out for changes in the business environment that would impact either members or EBAA</li> </ul>

Strategic Driver	Goals
<b>Advocacy</b> Influence stakeholders and promote public policy that supports issues of importance to corneal surgery, eye banks, and patients	<ul style="list-style-type: none"> <li>• Advocate to physicians</li> <li>• Advocate to government</li> <li>• Advocate to and with other organizations</li> <li>• Advocate for reimbursement - public and private</li> </ul>

The Board subsequently ratified this plan, which took effect on January 1, 2016. Staff and committees have been using these goals to guide their actions, and have made great progress towards their attainment.

To see the full text of EBAA's strategic plan, please visit <http://restoresight.org/who-we-are/governing-documents/strategic-plan-summary/>

# NATIONAL EYE DONOR MONTH

## Celebrating the Gift of Sight

The Eye Bank Association of America (EBAA) continued to shape National Eye Donor Month (NEDM), a month dedicated to promoting awareness of the need to register to be an eye donor, recognizing donors and their families, and celebrating the lives of corneal recipients. EBAA also uses the month to acknowledge eye bankers and corneal surgeons who work to make sight restoration possible.

Since President Ronald Regan proclaimed the first National Eye Donor Month in 1983, EBAA and member eye banks across the country have strived to use this commemoration as a platform to increase awareness about eye donation and corneal transplantation.

For many individuals, the NEDM website is the first touch point with the association and any educational resources. Visits to our website totaled 2,400 views during NEDM, an increase of 56 percent over this period in the previous year. Of those viewers, 643 entered our website directly from the NEDM page.

Our Facebook following has also grown to more than 1,500 likes, representing a slight growth over last year. Member eye banks and various transplant and donation organizations were actively engaged with EBAA and posted images, events, and stories to Facebook. The most frequented posts were regarding the art contest winners, donor/recipient stories, and facts about cornea donation. The most active post included the number of transplants for 2015; it reached 7,500 people, was shared 86 times, and earned 333 likes.

Elected officials in ten states, cities, and counties across the country signalled the importance of eye donation and corneal transplantation in proclamations for NEDM.

As the Association looks ahead to National Eye Donor Month 2017, we will continue to honor the amazing influence of our member eye banks by aggressively pursuing greater awareness, increased support for families and research that will lead to prevention, treatment and, ultimately the restoration of sight.



# CERTIFICATION UPDATE

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A total of 94 candidates took the Certified Eye Bank Technician Exam between October 2015 and November 2016, with 70 individuals passing the exam. Brian McArdle received the highest score for the entire year, while Gene Keating and Mark Gentile received the highest score on the Spring exam and Ari Rahmanian received the highest score for Fall 2016. Congratulations to all of the individuals listed below who passed the exam this year and became Certified Eye Bank Technicians!

## Class of Fall 2015

**Steve Ciment, CEBT**

*Lions Eye Bank of Delaware Valley*

**Kendall Frank, CEBT**

*Lions Eye Bank of West Central Ohio*

**Jason Hardy, CEBT**

*SightLife*

**Brittany Hauser, CEBT**

*SightLife*

**James Horning, CEBT**

*Rocky Mountain Lions Eye Bank*

**Susan Hurlbert, CEBT**

*Eversight Illinois, Bloomington*

**Annam Hussaini, CEBT**

*The Eye-Bank for Sight Restoration*

**Christopher Johns, CEBT**

*Center for Organ Recovery  
& Education*

**Kayla Jones, CEBT**

*Eversight Ohio*

**Addam Ketchen, CEBT**

*TBI Orlando / Medical Eye Bank of  
Florida*

**Nicole Klein, CEBT**

*Lions Eye Bank of West Central Ohio*

**Zachary Mathes, CEBT**

*Saving Sight*

**Keri Mattson, CEBT**

*San Antonio Eye Bank*

**Brian McArdle, CEBT**

*The Eye-Bank for Sight Restoration*

**Chantel Moore, CEBT**

*Mid-America Transplant*

**Dana Pedigo, CEBT**

*Saving Sight*

**Sabrina Rodriguez, CEBT**

*Florida Lions Eye Bank*

**Lindsey Savitt, CEBT**

*Eversight Ohio*

**Paul Scheer, CEBT**

*Mid-America Transplant*

**Lisa Stewart, CEBT**

*Northeast Pennsylvania  
Lions Eye Bank*

**Jenni Thomas, CEBT**

*Saving Sight*

## EBAA Certified Eye Bank Technician Program Turns 35!

In 2016, the Certified Eye Bank Technician (CEBT) program celebrated its 35th Anniversary. The first CEBT exam was administered in 1981 with forty-five individuals passing the exam to become the first class of CEBTs. Happy 35th Anniversary to the five individuals who have been certified since 1981: Beth Binnion, Patricia Dahl, Jeffrey Penta, William Proctor, and Doyce Williams. EBAA recognizes these individuals and all CEBTs for their dedication to the certification program and the eye banking profession.

# CERTIFICATION UPDATE *(continued)*

## Class of Spring 2016

**Amy Astle, CEBT**

Oklahoma Lions Eye Bank

**Amanda Bisher, CEBT**

Saving Sight

**Shannon Bodell, CEBT**

Iowa Lions Eye Bank

**John Cherry, CEBT**

Indiana Lions Eye Bank

**Ashley Coots, CEBT**

Sight Society of NENY, Inc.  
(Lions Eye Bank at Rochester)

**Jonathan Czaplicki, CEBT**

Upstate New York Transplant Services

**Heather DaSilva, CEBT**

SightLife

**Gary Delamatre, CEBT**

Saving Sight

**Anthony DeRose, CEBT**

Indiana Lions Eye Bank

**Andreea Dianu, CEBT**

Lions Eye Bank of Wisconsin

**Lindsey Elbanhawy, CEBT**

SightLife

**Tina Evenson, CEBT**

Nevada Donor Network

**Xochitl Garcia, CEBT**

OneLegacy

**Mark Gentile, CEBT**

Regional Tissue Bank

**Elizabeth Holland, CEBT**

Lifebanc

**Clinton Jamison, CEBT**

Sierra Donor Services Eye Bank

**Gene Keating, CEBT**

Minnesota Lions Eye Bank

**Ross Kelt, CEBT**

Baton Rouge Regional Eye Bank

**Brianna O'Brien, CEBT**

Lions Eye Bank of Wisconsin

**Leisa Ouellet, CEBT**

New Brunswick Organ and Tissue  
Donor Program - Ocular Division

**Sotiria Palioura, MD, PhD, CEBT**

Florida Lions Eye Bank

**Ashley Philligin, CEBT**

Sierra Donor Services Eye Bank

**Renee Richards, CEBT**

ISR Eye Bank of Louisiana

**Taylor Robinson, CEBT**

UT Southwestern Transplant Services  
Center Lions Eye Bank

**Alyson Ronan, CEBT**

Southern Eye Bank

**Jackie Rossi, CEBT**

Lifebanc

**Hannah Sanders, CEBT**

SightLife

**Yesenia Sanson, CEBT**

OneLegacy

**Julie Todd, CEBT**

TBI Orlando / Medical Eye Bank  
of Florida

**Thong Yang, CEBT**

Sierra Donor Services Eye Bank

## Class of Fall 2016

**Lindy Brown, CEBT**

Northeast Pennsylvania  
Lions Eye Bank

**Jaimee Carroll, CEBT**

Lions Medical Eye Bank & Research  
Center of Eastern Virginia

**Blanca Cohen, CEBT**

OneLegacy

**Katrina Dwyer, CEBT**

Rocky Mountain Lions Eye Bank

**Christopher Gaudette, CEBT**

Utah Lions Eye Bank @ John A. Moran  
Eye Center

**Nicholas Hicks, CEBT**

Eversight

**Kara Johnston, CEBT**

Indiana Lions Eye Bank

**Jeremy Lemmons, CEBT**

Arkansas Lions Eye Bank & Laboratory

**Devon Niewohner, CEBT**

UT Southwestern Transplant Services  
Center Lions Eye Bank

**William Ostrander, CEBT**

Lions Eye Bank of Delaware Valley

**Ari Rahmanian, CEBT**

Eye Bank of British Columbia

**Lisa Robinson, CEBT**

Lions Eye Institute for Transplant  
& Research

**Jonathon Stone, CEBT**

Sight Society of Northeastern  
New York

**Wang To, CEBT**

Hospital Authority Eye Bank

**Anthony Vizzerra, CEBT**

Donor Network of Arizona

**David Wernsman, CEBT**

Donor Network of Arizona

**Kam Hon Wong, CEBT**

Hospital Authority Eye Bank

**Kimberly Wong, CEBT**

SightLife



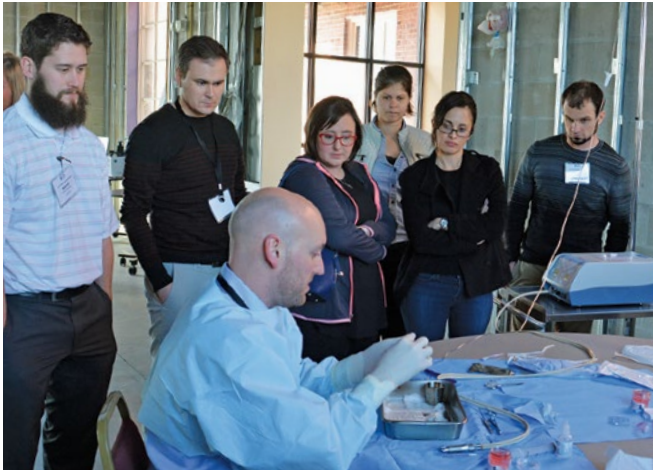


For a second year in a row, attendees had the opportunity to learn more through breakout sessions focused on tissue processing, recovery and in-situ procedures, authorization and consent, and slit lamp microscopy.

Photo courtesy of Eversight Michigan



# 2016 TECHNICIAN EDUCATION SEMINAR



The 2016 Technician Education Seminar was a great success. The seminar took place January 20-23 at the Lions Eye Institute for Transplant and Research (LEITR) in Tampa, Florida. Although it was a bit chilly for Florida, the sun was mostly shining as EBAA welcomed 54 attendees from the U.S., Canada, and Ireland to the seminar.

This long beloved seminar started the program off strong with two personal accounts about the gift of sight and the importance of sight and research. Dawn Futch, a donor mother, spoke about her son, Michael-Gene, and how he was able to give the gifts of sight and life to multiple individuals. Attendees were moved by her son's story and the legacy he left behind. April Lufriu, the 2012 Mrs. World who suffers from retinitis pigmentosa (RP), spoke to attendees about how she and her children are all losing their eyesight to RP and how this has affected their lives. April's presentation reminded attendees of the importance of our mission to restore sight worldwide and how essential research can be in fighting various diseases and types of blindness. EBAA is thankful to both of these speakers for sharing their stories with the seminar attendees.

The rest of the seminar went by quickly with a variety of presentations, demonstrations, hands-on experiences, case studies and breakout sessions. For the second year in a row, attendees had the opportunity to learn more about two specific areas of eye banking that had been



covered earlier during the seminar through breakout sessions focused on tissue processing, recovery and in-situ procedures, authorization and consent, and slit lamp microscopy. After the program, several attendees expressed how much they learned during this short amount of time and how valuable this course was to their education in eye banking.

The EBAA would like to thank this year's faculty, Kristen McCoy, Josh Galloway, Shannon Schweitzer, Sam Ramos, and Dr. George Rosenwasser for preparing and facilitating the TES curriculum and for lending their time and expertise to the education of eye bank technicians. Thank you to the Lions Eye Institute for Transplant and Research for hosting the seminar, providing tissue and equipment, and lending staff to assist with the seminar. The EBAA would also like to give a special thanks to Jason Woody, Andrew Mullins, James Rosa, Eric Abdullayev and David Morton for assisting with materials, presentations, and demonstrations. The program continues to grow and we look forward to welcoming a new group of eye bankers at the 2017 Technician Education Seminar in Tampa, Florida, February 1-4, 2017.



Attendees heard lectures on anatomy, surgical procedures, and best practices in tissue evaluation. They also received many hours of individual hands-on training evaluating tissue using slit lamp microscopes.





## 2015 Slit Lamp Microscopy Seminar

The 2015 Slit Lamp Microscopy Seminar was held October 8-10, 2015, at the Minnesota Lions Eye Bank in St. Paul Minnesota. EBAA was excited to welcome 17 technicians to the second year of the course. During the three-day seminar, the attendees heard lectures on anatomy, surgical procedures, and tissue evaluation techniques and best practices, and received many hours of individual hands-on training evaluating tissue using slit lamp microscopes. Most of the attendees arrived at the course with little experience and left with a greater knowledge and confidence in evaluating tissue using slit lamp microscopy.

The faculty for the course included Kristen McCoy (Eversight), Dean Vavra (Miracles in Sight), Wade McEntire (Utah Lions Eye Bank), and Dr. Joshua Hou (Minnesota Lions Eye Bank). A special thanks to the Minnesota Lions Eye Bank staff for all of their assistance with the course, especially Lori Pederson and Veronique Grimes for securing microscopes and assisting with tissue evaluations.

EBAA would like to thank everyone who planned and facilitated the 2015 Slit Lamp Microscopy Course to ensure that the attendees received a well-rounded introduction to slit lamp microscopy. Thank you to Minnesota Lions Eye Bank for hosting the seminar, providing tissue for attendees to evaluate, and lending staff members to assist with the course. Thank you to Walman Instrument Group for providing the majority of the slit lamps, which allowed the attendees to spend a lot of time on the microscopes to evaluate tissue. EBAA would also like to thank Eversight for providing additional tissue for evaluations.

The seminar was a great success and we look forward to holding the event again in 2017!



## Run for Vision

### 31st Annual Run for Vision

Nearly 300 ophthalmologists, eye bankers, donor family members, corneal transplant recipients and others registered to participate in the 31st Annual Run for Vision 5K on Sunday, October 16, 2016.

The event, which has been sponsored by Bausch + Lomb since 1985, raised almost \$14,000 to support EBAA's mission to restore sight. Unfortunately, extreme weather and severe lightening came through Chicago on the morning of the race, forcing the cancellation the event, along with several other local races that morning.

We look forward to sunnier skies at the 32nd Annual Run for Vision, which will be held Sunday November 12, 2017 in New Orleans, Louisiana.

# AWARDS AND HONORS

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## Leonard Heise Awardee

**Bernie Iliakis, MHA, CEBT**, began his extensive career in eye banking over 20 years ago, when he joined the Northwest Lions Eye Bank (now SightLife) staff in 1995 as an eye bank technician. He earned his Certified Eye Bank Technician (CEBT) designation in 1996 and went on to serve as SightLife's Technical Director before taking on his current role as Chief Operating Officer in 2003. Throughout his eye banking tenure, Bernie has overseen the distribution of more than 75,000 sight-restoring grafts to nearly 50 countries worldwide.

As a dedicated volunteer on various EBAA boards and committees, Bernie has held past tenures on the Technician Education (Co-Vice-Chair), Procedures Manual (Chair), Constitution and Bylaws, and Scientific Programs Committees. He spent 14 years on the Accreditation Board and currently shares his expertise in eye banking on the Medical Advisory Board (2004-present) and EBAA Board of Directors (2012-present).

Beyond the borders of the U.S., Bernie has consistently influenced eye banking through instruction and presentation at sessions for organizations such as the Asia-Pacific Academy of Ophthalmology, European Eye Bank Association, Japan Society of Tissue Transplant, Eye Bank Association of India, Kyoto Prefectural University of Medicine, and Global Alliance of Eye Bank Associations.

Bernie has co-authored various articles and abstracts on corneal techniques, research, and transplantation-related topics, which were published in *Cornea*, the *American Journal of Ophthalmology*, *Current Eye Research*, and the Association of Research in Vision and Ophthalmology's abstract program.

Bernie received his Master's Degree in Health Administration from the University of Washington (UW) and graduated cum laude with a Bachelor of Science in Zoology, also from the UW. His hobbies include travel, sports, history and especially spending time with his wife, daughter, and son. A first generation American of Greek and Italian descent, Bernie is originally from Spokane, Washington, and has lived in the Seattle area since 1990.



## AWARDS AND HONORS *(continued)*

### R. Townley Paton Award

**Mark A. Terry, MD**, Medical Director of Lions VisionGift, received the 2016 R. Townley Paton Award on October 14, 2016, during the Fall Educational Symposium in Chicago, Illinois.

Since 1990, Dr. Terry has served as Director of Cornea Services at Legacy Devers Eye Institute and as the Medical and Scientific Director of Lions VisionGift (formerly known as Lions Eye Bank of Oregon). Under his leadership, the Corneal Services team has done more corneal transplants than any other department in the Northwest. With the help of research grants from Lions VisionGift and Devers Foundation, Dr. Terry and his team performed the first modern transplant of endothelial keratoplasty (EK) in the United States in March of 2000, the second such type of case in the world. Today, Dr. Terry is a part of the largest and longest-running prospective series in the world of EK, and it has yielded over 100 scientific papers to date.

Dr. Terry currently serves as a member of the EBAA Medical Advisory Board and previously as the President of the Western Region (1993-1995).

To view Dr. Terry's Paton Lecture titled, *"The Evolution of Endothelial Keratoplasty: A Personal Journey,"* please [click here](#).

The R. Townley Paton Award is EBAA's highest honor for corneal surgeons presented annually to an ophthalmologist in recognition of his/her contributions to EBAA for exemplifying the precepts of R. Townley Paton, MD, a prominent corneal surgeon, the father of modern eye banking, and the founder of the first eye bank established in the United States.

Dr. Terry and his team performed the first modern transplant of endothelial keratoplasty (EK) in the United States in March of 2000, the second such type of case in the world.



## AWARDS AND HONORS *(continued)*

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### Mary Jane O'Neill Fellowship

**Ellen S. Lagan** is the Eye Bank Manager at Santa Lucia International Eye Bank of Manila-Eye Bank Foundation of the Philippines (SLIEB-EBFP). She is responsible for coordinating day-to-day operations, including ensuring adherence to the eye bank's quality management policies and procedures, promoting quality awareness, reviewing the quality management system, and making necessary recommendations for continual improvement and issue resolution. After attending the EBAA 55th Annual Meeting, Ellen spent one week at the Eye-Bank for Sight Restoration to complete her fellowship.

The Mary Jane O'Neill (MJO) Fellowship in International Eye Banking was established in 2001 to provide medical and technical personnel from eye banks in developing countries with the skills necessary to develop, operate, and maintain successful eye banks - ultimately, reducing blindness due to corneal disease or injury. Each year, the Fellowship brings an individual to the United States to intern at an EBAA eye bank in order to learn the practice of eye banking through the clinical, technical and business aspects of the U.S. eye banking systems.

The Eye Bank Association of America and the Eye-Bank for Sight Restoration in New York City established this Fellowship to honor Ms. Mary Jane O'Neill, The Eye-Bank's Executive Director from 1980 to 2000



### Jachin Misko Scholarship for Technical Advancement in Eye Banking

**Kelly Odell, CEPT**, is a Processing Technician II at Lions VisionGift in Portland, OR. As a new processing technician, Kelly almost immediately stepped in to help lead several tissue processing courses on DMEK. She was instrumental in perfecting Lions VisionGift's sterile tissue processing opportunities, initiating procedural changes and writing the training work aids to explain them. Kelly is a natural at taking her daily tasks, organizing and planning them quickly, and directing others assigned to help to ensure all deadlines are met.

"The TES gave me a greater respect for the specific skills needed in various roles within an eye bank and for those whose roles span multiple departments and disciplines...Most importantly, the seminar has given me the tools and resources I can carry with me throughout my career to critically think through most any situation that may arise and deal with it in the most suitable way."

- Kelly Odell, CEPT

## AWARDS AND HONORS *(continued)*

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### Gift of Sight Award

**Mary E. Case, MD**, has been an exceptional advocate for corneal and tissue donation in St. Louis and surrounding areas. Thousands of donor families and transplant recipients have received a new lease on life through corneal and tissue donation because of her leadership with St. Louis-area medical examiners' staff.

Dr. Case ensures a donation is an option for deaths that fall under the Medical Examiner's jurisdiction in St. Louis, Jefferson, Franklin, and St. Charles counties. As a result of her tireless support of donation, medical examiner staff, death investigators, and pathologists work in cooperation with Mid-America Transplant to give families the selfless opportunity to donate a loved one's organs, eye, and tissue. Dr. Case also works in tandem with Mid-America Transplant to ensure complicated deaths such as homicides, child deaths, and unknown causes, are still considered for donation. She routinely allows the donation to commence before an autopsy and expeditiously releases preliminary causes of death to make corneas available for transplant.

In addition to personally and professionally supporting and advocating for donation, Dr. Case has created a culture at the St. Louis-area medical examiner office that is supportive of organ, eye and tissue donation. Her office provides donation opportunities and materials to families along with grief/bereavement resources and highlights donation on the office's website.



### Patricia Aiken O'Neill Scholarship

**Holly Fetzner, CMA, CEBT**, began her eye banking career as an eye bank technician/laboratory supervisor for the Lions Eye Bank of Northwest Pennsylvania (LEBNWPA). For the past seven years, Holly has contributed to quality assurance and procedural efficiency as the eye bank's Technical Director. She obtained Certified Eye Bank Technician (CEBT) status in 2009.

During her tenure at LEBNWPA, Holly has played an integral part in assuring that quality tissue is released for transplant, assisting in revisions and updates to the eye bank's policies and procedures, and keeping on-call technicians up-to-date on changes made to EBAA's Medical Standards and Procedures Manual.

# RESEARCH GRANTS

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Each year, EBAA awards the Richard Lindstrom Research Grants to fund proposals specifically concerned with issues directly related to eye banking and/or corneal transplantation. The EBAA Research Committee, comprised of both physicians and eye bankers, reviewed all of the applications and made the final decision regarding the awards during the Annual Meeting in June. The following projects were selected for funding.

## **Comparative Study on Different Xenobiotic-free Culture Media for Human Limbal Epithelial Stem Cells**

**Sheyla Gonzalez, PhD**

*Jules Stein Eye Institute, University of California, Los Angeles*

Amount Awarded: \$4,718.90

## **Effect of Refrigeration and Ventilation Time on Corneal Donors**

**Moulaye Haidara, MD**

*University of Maryland, Baltimore*

Amount Awarded: \$5,000

## **Assessing the Viability of Gabor Domain Optical Coherence Microscopy for Endothelial Cell Evaluation**

**Holly Hindman, MD, MPH**

Amount Awarded: \$5,000

## **Ex Vivo Expansion of Cadaveric Limbal Stem Cells Using Cadaveric Serum as Culture Medium and Descemet's Membrane as Carrier Substrate**

**Joshua Hou, MD**

*University of Minnesota*

Amount Awarded: \$5,000

## **The Use of Neuropeptides to Improve Graft Survival in Corneal Transplantation**

**Ahmad Kheirkhah, MD**

*Massachusetts Eye and Ear Infirmary*

Amount Awarded: \$5,000

## **In Vitro Comparison of Endothelium-side-in vs. Endothelium-side-out DMEK Techniques in the Wet Lab**

**Christopher Sales, MD, MPH**

*Lions VisionGift*

Amount Awarded: \$4,500

## **Assessing Donor Tissue Suitability for DMEK Preparation: Mechanical Properties of Descemet Membrane in Donors with Diabetes Mellitus**

**Edward Sander, PhD**

*The University of Iowa*

Amount Awarded: \$5,000

## **Determining and Characterizing Corneal Plasmacytoid Dendritic Cells in Human Corneas**

**Victor Sendra, PhD**

*Tufts Medical Center*

Amount Awarded: \$4,900

## **Role of Corneal Nerves in Modulating Alloimmunity**

**Yashar Seyed Razavi, PhD**

*Tufts Medical Center*

Amount Awarded: \$ 4,983.50

## **Glutamine Supplementation for Corneal Endothelium Protection**

**Wenlin Zhang, MD**

*Indiana University*

Amount Awarded: \$ 4,993



# NETWORKING GRANTS

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## 2016 Networking Grant

In 1992, the Executive Committee established the Networking Grants to promote collaboration and the interchange of ideas between eye banks. This unique grant allows staff from one eye bank to visit another eye bank to learn a specific aspect of eye banking or to work on a project of common interest.

This year, the EBAA Board of Directors awarded a networking grant of \$1,500 to Saving Sight. A representative from Saving Sight will visit Lions VisionGift to jointly assess available training, tools and techniques in response to departures, deviations and complaints. The goal of the trip is to create tools for guidance in the identification of events and develop training tools for investigation, root cause analysis and corrective action. EBAA congratulates Saving Sight for receiving the grant and looks forward to hearing about the information that is learned and shared during the trip.



# LEADERSHIP ROSTER

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Jennifer Li, MD

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**Director of Regulations and Standards**

Stacey Gardner  
**Director of Education**

Yolanda Raine  
**Communications Manager**

Genevieve Casaceli  
**Membership Programs Coordinator**

Tom Bruderle  
**Legislative Consultant**

# OUR SUPPORTERS

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The EBAA would like to extend our gratitude to the following organizations for their commitment and dedication to our vision to restore sight worldwide. Our efforts would not be possible without their support.

## 2016 Supporters

Georgia Eye Bank  
HAI Laboratories, Inc.  
Lions VisionGift  
Medline  
Mid-America Transplant  
SightLife  
Stradis Healthcare  
Transplant Connect  
Vision Share

## 2016 Exhibitors

Alphapointe  
Axis Global Logistics  
Bausch + Lomb  
BIONIKO  
Digi-Trax Corporation  
Donate Life America  
Donate Life Rose Parade Float  
(OneLegacy Foundation)  
ECL2/Q-Pulse  
Gebauer Medizintechnik GmbH  
Haag-Streit USA  
HAI Laboratories, Inc.  
ICCBBA  
Konan Medical USA, Inc.  
Krolman  
LABS, Inc.  
Medline  
MED-LOGICS, Inc.  
MedMira U.S., Inc.

Moria, Inc.  
National Disease Research  
Interchange  
Numedis, Inc.  
Prescott's, Inc.  
Quick - Specialized Healthcare  
Logistics  
Restore Sight International  
Statline  
Stephens Instruments  
Transplant Connect  
VRL Laboratories

## 2015 Supporters

Georgia Eye Bank  
Eversight  
HAI Laboratories, Inc.  
Konan Medical USA, Inc.  
Lions VisionGift  
Miracles in Sight  
Medline  
SightLife  
Transplant Connect

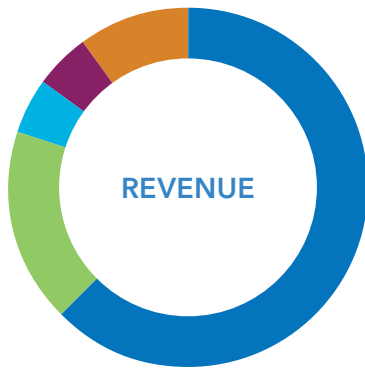
## 2015 Exhibitors

Alphapointe  
Axis Global Logistics  
Bausch + Lomb  
BIONIKO  
Digi-Trax Corporation  
Donate Life America

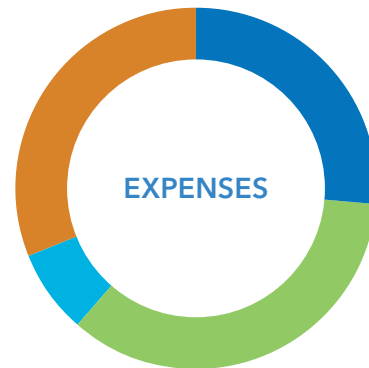
Donate Life Rose Parade Float  
(OneLegacy Foundation)  
ECL2/Q-Pulse  
Gebauer Medizintechnik GmbH  
Global Sight Network  
HAI Laboratories, Inc.  
ICCBBA  
Konan Medical USA, Inc.  
Krolman  
LABS, Inc.  
Medline Industries, Inc.  
MED-LOGICS, Inc.  
Miracles in Sight  
Moria, Inc.  
NanoCool  
National Disease Research  
Interchange  
Numedis, Inc.  
Ocular Systems, Inc.  
Prescott's Inc.  
Providence Packaging  
Quick International Courier  
Restore Sight International  
Statline  
Stephens Instruments  
Stradis Healthcare LLC  
Transplant Connect  
ViroMed Laboratories  
VRL Laboratories



# FINANCIAL REPORT



● Member Dues	1,379,293
● Meeting Registration	386,008
● Accreditation Fees	107,750
● Technician Exam/Recertification	104,875
● Other Contributions	227,137
<b>TOTAL</b>	<b>2,205,063</b>



● Member Services	535,080
● Member Meetings	708,960
● Accreditation	150,058
● Administrative	629,032
<b>TOTAL</b>	<b>2,023,130</b>

# STATISTICAL REPORT

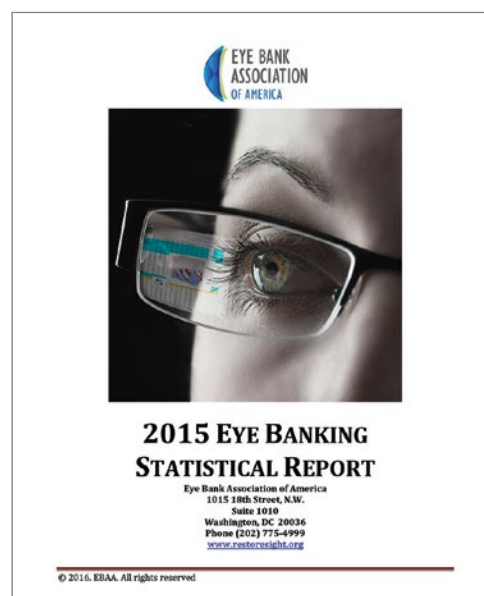
EBAA's **2015 Eye Banking Statistical Report** is the world's most comprehensive examination of eye banking processes and trends and represents a complete picture of eye banking activity in the U.S. This year's report is separated into sections which correspond to the EBAA Statistical Report Ledger. Bookmark links have been added to allow you to go to specific points of interest.

This year's report includes five-year trending graphs, including domestic and international surgery trends, the surgical indications for keratoplasty by surgery type (PK, EK, and ALK), and the popular annual comparison of the domestic use of U.S. supplied intermediate-term preserved tissue. Dr. Van Meter's analysis of the types of keratoplasty performed for a specific diagnosis separates the indications for transplant into four basic categories: 1) endothelial cell failure; 2) stromal or full thickness (non-endothelial) disease; 3) regrafts; and 4) unknown.

Holly B. Hindman, MD, MPH again provided a synopsis of our statistical report for our Paton members. EBAA's *2015 Fast Facts for Physicians* included the highlights and graphics from the statistical report most useful to surgeons. New this year are graphs comparing the keratoplasty procedures performed for Fuch's endothelial dystrophy and keratoconus over the past five years.

The 71 domestic eye banks in 2015, reported 130,987 total tissue recoveries, an increase of 1.8% from 128,675 recoveries in 2014. Total donors in the United States were 66,526, up 1.5% from 2014. For the second year in a row, more cornea donors (52.8%) were listed on a donor registry than not.

The total number of U.S. supplied tissue distributed for keratoplasty (including long-term preserved tissue) was 79,304, a 3.8% increase from 76,431 in the previous year. 25,832 (34.6%) of U.S. intermediate-term preserved corneas were exported internationally in 2015. Penetrating keratoplasty (PK) numbers increased 1.6%, endothelial keratoplasty (EK) numbers increased 6.0%, and tissue used for lamellar keratoplasty (ALK) increased 12.7% in 2015 compared with 2014.



In the U.S., the reported number of corneal transplants performed in the United States increased from 47,530 in 2014 to 48,792 in 2015. Domestically, the number of PKs performed continued to decrease in 2015 (19,160, -0.7%). At the same time, the number of corneas used domestically for EK increased (27,208, 4.8%) in 2015. Endothelial keratoplasty has been the most commonly performed procedure in the U.S. for the past four years and continues to increase. The increase in EK in 2015 was due to the increased number of DMEK procedures (4,694), an increase of 63.8% whereas DSEK/DSAEK decreased by 2.5% relative to 2014. Domestically, there was an increase in ALK (1,115, 22%) procedures in 2015.

The *Eye Banking Statistical Report* would not be possible without the active participation and support of all our members and the dedication of the EBAA Statistical Report Committee. The Statistical Report is a valuable and useful resource for eye banks to review their operational efficacy and to drive performance improvement efforts.



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Photo courtesy of Eversight Michigan



# 2015-2016 HOST EYE BANKS: THANK YOU

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Throughout the year EBAA produces and hosts a variety of events and programs that occur thanks to the generosity of member eye banks who volunteer to act as host eye bank. A host eye bank usually lends staff and resources to the EBAA that are instrumental to the success of the program or event. EBAA would like to thank the following eye banks for hosting EBAA programs and events from July 2015-December 2016.



Host of 2015 Networking Grant visit

**Minnesota Lions Eye Bank**



Host of 2015 Slit Lamp Seminar



Host of 2016 Technician Education Seminar



Host of 2016 Mary Jane O'Neill Fellowship



Host of 55th Annual Meeting



Host of 2016 Networking Grant visit



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