Vision Access

A Magazine by, for and about People with Low Vision

Volume 21, Number 2 Summer, 2014

Published Quarterly for Members in These Formats: Large Print, 4-Track Cassette, Email, Audio CD and Data CD

Copyright 2014 by

the Council of Citizens with Low Vision International, a not-for-profit organization affiliated with the American Council of the Blind

Council of Citizens with Low Vision International 2200 Wilson Blvd., Suite 650
Arlington, VA 22201
800-733-2258
www.cclvi.org
info@cclvi.org

Views expressed in Vision Access by contributors do not necessarily reflect the views of the editor or of CCLVI. All rights revert to individual contributors upon publication.

Vision Access welcomes submissions from people with low vision, from professionals such as ophthalmologists, optometrists, low vision specialists, and everyone with something substantive to contribute to the ongoing discussion of low vision and all of its ramifications. Submissions are best made as attachments to email or may also be made in clear typescript. Vision Access cannot assume responsibility for lost manuscripts. Deadlines for submissions are March 1, June 1, September 1, and December 1. Submissions may be mailed to Mike Keithley, Editor, 191 East El Camino Real #150, Mountain View, CA 94040; 650-386-6286, editor@cclvi.org.

Publications Committee:

Joyce Kleiber, Sarah Peterson, Valerie Ries-Lerman, and Mike Keithley

Join our Social Networks.

CCLVI is now on Twitter at twitter.com/CCLVI_Intl and Facebook by searching for "Council of Citizens with Low Vision International." Questions? Email fb@cclvi.org.

Table of Contents

Editor's Page, by Mike Keithley	4
The President's Corner: The Final Chapter,	
By Jim Jirak	4
Extra! Extra! Come Get Your Free CC-TV,	
by Jim Jirak	6
The CCLVI 2014 Convention Program:	
Living with and Learning About the	
Future of Low Vision,	6
"Siempre Otra Vez": Life from the Perspective of	
CCLVI's First Vice President Dan Smith,	
by Sarah Petersen	8
BrightFocus	11
Walgreens Press Release	12
T Station Technology for Visually Impaired to	
Debut in 2016	13
July - December, 2014: Let's Talk Low Vision	
Schedule	15
Summary: New Research Sheds Light on How	
UV Rays May Contribute to Cataract	16
Request for Contributions	17
Officers and Board of Directors	18
CCLVI Membership Application	19
* CCLVI Local Chapter Affiliates	21

Editor's Page, by Mike Keithley

Welcome to the Summer, 2014 issue of Vision Access.

I was talking to a subscriber the other day, and the subject of going to the ACB convention came up, specifically attending CCLVI meetings and voting. She couldn't go, having no money and not being able to vote, either. But what about voting via the phone?

The way the CCLVI Constitution is written (Article III, section 3), one must be at convention to vote. So if I can't go, I can't vote. This is the traditional approach, but how fair is it? Conventions are expensive, often distant, and if I don't have money to attend, am I locked out of participating in CCLVI business?

I don't think so. I could cast votes via the telephone. While it's true that only ACB's GDUI affiliate has changed its Constitution to allow this, and I understand there is still debate about the action, the process is being tried. And I think it's a step in the right direction. Email and phone conferences are on the rise, and a less restrictive voting method makes sense. Voting by phone is a long way off, but let's consider it sometime!

In closing, let me point you to an interesting research article in the May 2014 AccessWorld magazine called "eSight Eyeware and Smart Glasses from Assistive Vision" at www.afb.org. Additionally, there is a very helpful AccessWorld app for the iPhone. I use it with braille, but I'm betting people with low vision will find it enjoyable.

Organization News

The President's Corner: The Final Chapter, By Jim Jirak

As I begin my final remarks as CCLVI President, I'd like to look back at the past two years of my regime. When I was elected in Louisville, I had high hopes and aspirations for recruiting and bringing in younger members. As I was having difficulties filling committee positions, it was also my intention to hold a series of

CCLVI Chats in an effort to get to know the membership on a more intimate level. Unfortunately neither of those ideas came to fruition.

On a more positive note, in the fall of 2012, CCLVI had been selected to sit on the U.S. Access Board's working group. This group was

tasked with identifying best practices for the delivery of prescription drug label information so it could be made accessible to individuals who are blind or visually impaired. The work was intended to promote privacy and independence for individuals who take prescription medication. Many thanks to CCLVI member Annette Carter for representing our interests and emphasizing the low vision aspect of text on drug labels.

The other news of importance requires some background information. During the annual convention of the American Council of the Blind in Phoenix, Dr.. Bill Takeshita, in consultation with then President Richard Rueda, proposed the concept of a book to inform low vision persons of available services and resources. With this concept, in consultation with CCLVI's Board of Directors, a book has been produced entitled Insights into Low Vision. The authors include some of the leading experts in the field of low vision from throughout the country. This publication was unveiled in July 2013 in Columbus during CCLVI's convention programming and went on sale to the general public at that time. For tech savvy folks, the CCLVI Board also authorized a digital format with an audio version and a Microsoft Word document that could be downloaded from the CCLVI website. This option is still under production. I'd like to thank those members of the book committee, the previous CCLVI Board of Directors, and Dr. Bill and

Richard Rueda for their efforts in not only conceptualizing the idea, but also seeing it through to its completion.

during the 2014 ACB National Conference and Convention, the Public Relations Committee will award CCLVI a certificate of recognition for the Insights into Low Vision project on Wednesday afternoon, July 16, starting at 2:45.

As I conclude my final chapter of president and put the pad lock on "The President's Corner," I do so with an explanation with the Difference between "Complete" and "Finished"!

You see, no English dictionary has been able to adequately explain the difference between "complete" and "finished." However, in a recent linguistic conference held in London, England, attended by some of the best linguists in the world, Samsundar Balgobin, a Guyanese, was the clear winner.

His final challenge was this: Some say there is no difference between "complete" and "finished." Please explain the difference between "complete" and "finished" in a way that is easy to understand.

Here is his astute answer: "When you marry the right woman, you are COMPLETE. But, when you marry the wrong woman, you are FINISHED. And when the right one catches you with the wrong one, you are COMPLETELY FINISHED!"

His answer was received with a standing ovation lasting over 5 minutes.

Until the CCLVI convention and annual membership meeting in Las

Vegas, thank you for your support and your confidence in me as president. It has truly been an honor and a pleasure.

Extra! Extra! Extra! Come Get Your Free CC-TV, by Jim Jirak

The Council of Citizens with Low Vision International (CCLVI) announces the Dr. Sam Genensky Video Magnifier Memorial Awards. A total of three video magnifiers will be awarded to children and adults.

To read the award guidelines and complete an on-line application,

please visit www.cclvi.org/scholarships/?q=n ode/4.

Applications are being accepted through July 1. We look forward to receiving your application materials!

The CCLVI 2014 Convention Program: Living with and Learning About the Future of Low Vision,

By Jim Jirak, President, Charles Glaser, Convention Chairman

Saturday, July 12, 3:00 PM - 5:00 PM: Pre Convention Board meeting: Credentials Report; Constitution, By-Laws and Resolutions; and Convention Overview

5:00 PM - 6:00 PM: Nominating Committee

Sunday, July 13th. Opening Session Moderator: Charles Glaser, Convention Chairman, Stone Mountain, GA 9:00 AM - 9:15 AM: Welcome and Introductions
Jim Jirak, President, CCLVI,
Omaha, NE

9:15 AM - 10:30 AM: Latest Eye Research for People with Low Vision Special Guest Speaker Dr. Bennett McAllister

Dr. McAllister is an optometrist who specializes in low vision. He is a fellow of the American Academy of Optometry and a diplomat in low vision. He is presently the Chief of primary care at the Western Health Sciences University in Clairemont, California. He will discuss the latest treatments for many eye disorders. This presentation will include discussion of the benefits of vitamin therapy for macular degeneration, stem cells, gene therapy, and new medical treatments.

10:30 AM - 10:45 AM: Break

10:45 AM - 11:45 AM: Committee Reports including Nominating Report

11:45 AM - 12:00 Noon: Announcements

12:00 Noon - 1:15 PM: Lunch on your own

1:15 PM - 2:30 PM: What Is New in Optical Technologies for Low Vision Special Guest Speaker Dr. Bennett McAllister

Dr. McAllister will speak about the latest in low vision aids to help people with macular degeneration, diabetic retinopathy, glaucoma, and other causes of low vision. This lecture will include discussion of the importance of using sunglasses and filters, magnifiers, and customized low vision aids.

2:30 PM - 2:45 PM: Break

2:45 PM - 4:00 PM: Continuation of Committee Reports

4:30 PM - 6:30 PM: CCLVI Mixer

Monday, July 14: Technology Day Moderator: Charles Glaser, Stone Mountain, GA

1:15 PM - 2:30 PM: IOS for Low Vision Guest Speaker, Julian Vargas, Los Angeles, CA

Mr. Vargas is a specialist in mobile technology. He provides personal or group orientation in the use of IOS and Android mobile devices.

2:30 PM - 2:45 PM: Break

2:45 PM - 3:45 PM: Exhibitors Showcase Featuring ACB Exhibitors of Low Vision Aids Special Moderator: Kathy Casey, Albany, NY

3:45 PM - 5:00 PM: Android for Low Vision Guest Speaker, Julian Vargas, Los Angeles, CA

8:00 PM - 10:00 PM: Game Night Newlywed Game, Trivia, and Family Feud

Tuesday, July 15: CCLVI Business

1:15 PM - 3:30 PM: Business Meeting

3:30 PM - 3:45 PM: Break

3:45 PM - 5:00 PM: Post Convention Board Meeting

Wednesday, July 16: Low Vision or Totally Blind, "Who is King"? Moderator: Jim Jirak, Omaha, NE

1:15 PM - 2:30 PM: Panel discussion on the relationships between people with different visual capabilities.

Panelists: Paul Edwards, Miami, FL; Teddie-Joy Remhild, Burbank,

CA; Susan Kitazawa, San Francisco, CA; and Ken Stewart, New York, NY

2:30 PM - 3:00 PM: Wrap Up Jim Jirak, Omaha, NE

People

"Siempre Otra Vez": Life from the Perspective of CCLVI's First Vice President Dan Smith, by Sarah Petersen

Before my fingers pounce upon my keyboard, clickety-clacking enthusiastically while sharing a new acquaintance's inspirational story, I pause to remember what my involvement with the Council of Citizens with Low Vision **International and Vision Access** means to me. This involvement, as well as all the splendid people it has allowed me to interact with, represents my desire to proudly identify myself as an individual with low vision and seek advocacy for those in a similar situation. Dan Smith, CCLVI's first vice president who has graciously contributed some thoughts for the summer issue of Vision Access, heartily agrees. "I believe in the **American Council of the Blind** (ACB) and the Council of Citizens with Low Vision International (CCLVI) because we work in coalition with others to accomplish goals to help people who are blind and visually impaired. I've met many wonderful people in both these organizations and look forward to meeting many more,"

he says. Dan's words mirror my own thoughts, as I feel honored for receiving once again another opportunity to meet such a courageous soul and share his stories with readers all across the globe.

Born in Indiana as the oldest of five siblings, Dan acquired a sense for travel at an early age before leaving his mark on many parts of the United States. He lived in Maryland, Delaware, Ohio, and New York while growing up, eventually moving on to experiences in California where he attended high school. Even now, Dan writes to us on a bus from the Aegean Coast of Turkey. He has seen quite a bit before settling down at his present home in San Lorenzo, California with wife Ellen and two cats Adrian and Sebastian, but the adventures don't stop here! One of the biggest joys and motivators for traveling, according to Dan, is seeing how innovative people have been in solving problems all over the

world. "For the most part, I think people are pretty happy all over the world. I hope to continue to find ways to help people in need throughout the world. After I retire, I hope to spend more time living in other countries. English remains the language of commerce throughout the world. I hope to teach English to help people economically."

As Dan proceeds to describe his life story for us, we soon discover that his passion for travel and his keen awareness of the needs of others collided in a very significant event at only eighteen years of age. In the summer after high school, Dan attended a summer program for students who are blind or partially sighted at the **University of California at Santa** Cruz. "This was a pivotal experience for me because it was my first experience interacting with visually impaired peers. It was also my first experience living on my own," he explains. This summer experience, unbeknownst to Dan at the time, became the first of many exciting chapters in his life of advocacy and selfdiscovery.

Because being a non-driver was difficult in Southern California during the 1970's, Dan went on to attend San Francisco State University where transportation options are more available. Admitting that he didn't quite know what he wanted to be when he "grew up," he abandoned his decision to major in sociology and instead entered a program allowing students to design their

own majors. "This was designed as a teacher training program. I didn't want to be a teacher, but this program worked for me, too. I really liked this program because it permitted me to take all kinds of interesting classes." Through a summer job between his sophomore and junior years Dan gained valuable leadership experience. In this job he ran a church youth program. Because this job ended a few weeks after school began, he took the semester off to travel by thumb, by bus, and whatever way possible around the country. At the time he was considering going to graduate theological school. During this time, he visited several schools around the United States for a possible future in theological graduate studies, but most importantly, he met many interesting people and gained more self-confidence.

"After graduating, I had no clue about how I would support myself," he confesses. But after hearing about a group of people with disabilities who were demonstrating for equal rights, he decided to join their cause. "As someone with a disability facing employment discrimination, I knew I belonged with these people. We occupied the old Federal Building in San Francisco for twenty-eight days and we were successful in getting regulations passed to prohibit federal contractors from discriminating against people with disabilities." I sit in awe as I consider how an individual so fresh from college can possess such a strong

awareness of his calling and passion for advocacy. Young Vision Access readers, listen up and learn! This significant event in Dan's life served as a catalyst for numerous employment opportunities and outlets for his many talents.

Following college, Dan dabbled in some graduate studies in the field of social work and spent a year in law school. Although he decided not to remain in these studies, not being able to guit work, to this day he is grateful for the experience he gained trying out these programs. In his first job Dan worked for four years for the **Center for Independent Living** (CIL) in Berkeley, California. "I love the outdoors, so after four vears I needed some fresh air. I worked for about six months as a volunteer for the National Park Service in Yosemite National Park." Running their lost and found program, he lived in a tent-but this was no ordinary tent! It had electricity, a cold-water sink, and a wood-burning stove, with the best part being a frontal view of the majestic Yosemite Falls. "I missed my friends in Berkeley though, so I returned to city life and worked for several different nonprofit organizations. As anyone who has worked for a charitable business knows, generating the money needed to run the business is a constant struggle. I also realized that someone had to make determinations about who aets benefits. This led to my employment with the California **Department of Social Services** (DSS), monitoring Social Security contracts with each state to make

medical determinations for social security and Medicaid benefits. I worked for DSS for twenty-two years as an analyst and as a manager."

Five years ago, Dan was hired by Social Security's Office of Quality **Review's Disability Quality Branch** (DQB). There are about four hundred individuals in ten different offices around the country who review disability determinations to be sure they are correct. If the determination is correct, they pass it on to be effectuated. If not, they either fix it or return it to the state and explain what they need to do to correct it. "The state's funding is dependent on their accuracy, so our reviews are critical," Dan explains. "They also serve as training tools to help everyone run the program better. My job has permitted me to assist the **Regional Commissioner to help** develop agency policy, and to lead trainings in other parts of the country. I love my job!"

Assistive technology has played a valuable role in helping Dan perform his duties in his current job alongside his fully sighted coworkers. He uses twenty-inch monitors, and SSA has recently provided notebook computers permitting employees to work outside the office a few days each week. "Hopefully we'll be able to come up with a way to permit me to telecommute soon as well," he says. Dan was born with congenital cataracts, and being the first child, the condition wasn't discovered by his parents until he was about one and a half. "I've

had four eye surgeries. Now my corrected visual acuity in my best eye is 20/200." This condition is hereditary in his family and also appears with his youngest sister, who has a similar vision loss yet still possesses somewhat better vision than her brother.

Despite the struggles associated with his vision loss, Dan's positive attitude permeates every facet of his inspiring story. Much of Dan's motivation and positivity comes from his friends, especially Gary. "Gary was one of the most intelligent people I've ever met," Dan shares. "Another individual with a visual impairment, Gary was brilliant in understanding politics, science and economics. Unfortunately, like many brilliant

people, Gary used alcohol and drugs to help him deal with this world. Alcohol and heroin took Gary from us about ten years ago. Even that was inspirational. Life is a balance. It is important to do the best you can, but it's also important to take care of yourself. Find the balance of moderation in all that you do."

In closing, Dan leaves another valuable piece of wisdom for his readers with low vision. His email, siempreotravez@yahoo.com, says a lot about how he views life, because "siempre otra vez" means "always again" in Spanish. "Follow your dreams," he declares simply. "Even if they change, be flexible, but never give up on yourself."

Quality of Life

BrightFocus from the ACB leadership list

BrightFocus Foundation is a nonprofit organization supporting research and providing public education to help eradicate brain and eye diseases, including Alzheimer's disease, macular degeneration, and glaucoma. We are working to save mind and sight.

Our latest resource, BrightFocus Chats, is a free monthly telephone discussion on macular degeneration and low vision. For more information about these

discussions, please visit our registration page. Registrants will receive a phone call on the day and time of the phone discussion. They can also call a toll-free number if they choose not to register.

Registration and information page: www.brightfocus.org/telephone-presentation-registration.html

Visitors can also hear previous chats in a number of ways: listening to archived versions

online (or reading the transcripts) at

www.brightfocus.org/macular/res ources/audio.html#chats or listening to archived versions via the telephone number. Access www.brightfocus.org/brightfocus-chats-telephone-archive.html for instructions.

If you or any of your constituents have questions, I am always glad to talk. Thanks again for your help.

Kind regards, Ed Berger, Manager of Online Operations; BrightFocus Foundation, 22512 Gateway Center Drive, Clarksburg, Maryland 20871; Phone: 301-948-3244, Fax: 301-258-9454; eberger@brightfocus.org

Walgreens Press Release

[Editor's note: This is an edited version of the original, which can be found at news.walgreens.com.]

DEERFIELD, IL, June 3, 2014 -Walgreens, the nation's largest
drugstore chain (NYSE: WAG)
(Nasdaq: WAG), announced the
launch of a nationwide program
offering talking prescription
devices to customers with visual
impairments. The initiative
introduces a new service that
complements other accessible
prescription information
Walgreens currently provides.

Walgreens is the first in the industry to offer this exclusive talking prescription device, called the Talking Pill Reminder, at its retail locations chain wide. The device attaches to prescription containers and will be provided free of charge with prescription medications that Walgreens dispenses to its pharmacy customers who are blind or who have visual impairments. The Talking Pill Reminder can be recorded to speak the information

on the customer's prescription medication label and also has an audible alarm to remind patients when to take a medication.

The Talking Pill Reminder is available to customers of Walgreens retail pharmacies across the country and through Walgreens prescription mail service. The device is also available in Walgreens drugstores for purchase for a retail price of \$9.99.

The initiative is the result of a collaboration between Walgreens, The American Council of the Blind (ACB), and the ACB affiliates in California and Illinois. All partnering organizations praised the Walgreens announcement. In addition to providing the Talking Pill Reminder, Walgreens also offers large print patient information sheets to customers who have visual impairments. Walgreens' accessibility initiative will help people with visual impairments who have difficulty or

are unable to read a standard prescription medication label.

Contacts: Jim Cohn, 847-315-2950; Kim Charlson, President, American Council of the Blind, 617-501-5853, KimCharlson@ACB.org, www.acb.org/

T Station Technology for Visually Impaired to Debut in 2016 By Martine Powers, Boston Globe staff

{Editor's Note: The article is at www.bostonglobe.com/metro/201 4/03/16/new-technology-for-visually-impaired-debut-arlington-station/3f78woRN794pBjee3LCFcL/story.html.}

Navigating a T station can be challenging enough, even without a visual impairment. A new technology designed at the University of Massachusetts Amherst might make subway orienteering easier for people who are blind or visually impaired--or, more likely, for people who lack that innate Bostonian I-know-exactly-where-I'm-going sixth sense--by offering step-by-step instructions on how to get to their destination inside a T station.

The electronic navigation system, called PERCEPT, uses a Smartphone application to help people detect landmarks inside a station and provides verbal directions for moving from one spot to another. The technology is still a long way off from becoming ready for the public-- it will debut in Arlington Station in 2016-- but it offers a glimpse at a means of helping people with visual

disabilities that could spread systemwide.

Aura Ganz, a professor in the university's electrical and computer engineering department, has been working on this system since 2004, trying to develop a way that visually impaired people could walk into a strange building and find their way around without another person guiding them. She explained that GPS, while helpful for long-range navigation, is rarely exacting enough to orient people in a small space. Instead, she realized electronic tags could be installed at spots throughout a building, using technology that's a close cousin to the radiofrequency identification chips that **Massachusetts Bay Transportation** Authority fare gates use to read a Charlie Card. Tap the phone to these signs, and the phone will offer suggestions to the next spot en route to the final destination. The tags are placed behind existing signs or on fixed structures, and do not need to be plugged into a power source.

"It's not one long instruction,"
Ganz said. "It's an instruction that

leads you from one landmark to another." In tests so far, 19 out of 20 people who tried the Smartphone app were able to reach their final destination.

"The advantage of the system is that it will re-route you from anywhere to your destination," Ganz said. "It doesn't assume that you will always follow the correct path."

Now, the network of electronic tags and a corresponding Smartphone app is coming to Arlington Station, funded by a two-year \$238,321 grant awarded by the T, using money from the Federal Transit Administration.

Larry Haile, system-wide accessibility coordinator for the MBTA, said he first learned about PERCEPT at a conference on disability issues in 2011. His immediate reaction: That's what we need on the T.

"This would take a bit of the guesswork out of navigating around a station environment," said Haile, who knows from experience as he is visually impaired.

"The beautiful thing is that it doesn't just have to be for people with visual impairments," he continued. "Tourists would be able to get information about how to get to where they need to go."

A video of the technology in action is at www.youtube.com/watch?v=QmL tkdYrj_E&feature=youtu.be demonstrates how the app could

be used in an office building. It's not hard to see how they could be modified for a train station.

"This building is composed of one long hallway with exits at either end," the Smartphone declares audibly, in a robotic voice, after it is tapped against one of the tags. "Your first destination is Mail Room. Proceed until the end of Floor Rug, approximately 10 feet, then turn right until reaching the wall. Swipe next for further instructions."

Haile said that other more modern transit systems tend to have a more standardized design throughout their stations, usually an escalator that carries passengers down to the center of the platform. But anyone who's ventured into Boston's system of stations--many dating back to the early 1900s--knows that's not so here.

The T currently offers group training classes for people with disabilities who need extra assistance learning to use the public transit system; in some cases, T staff also provide one-on-one lessons. But an app, Haile said, would provide riders with an option that allows them to exercise their independence, learning to navigate local T stations on their own terms.

"The T, in terms of transferring from train to train, can be complex for people," Haile said. "You have to go through corridors and across platforms and down stairs--that's a lot to keep in mind." Haile said Arlington Station was chosen for the test run because of its simple layout. But if the trial is successful, it could expand to other stations in the system, even Haymarket and State Street, which

he said can be the most challenging stations for someone who can't see (or even for someone who can.)

Conference

July - December, 2014: Let's Talk Low Vision Schedule

{Editor's note: While this is redundant, it plugs the conference!}

Each month, the Council of Citizens with Low Vision International (CCLVI) provides a forum addressing topics of concern to people with low vision titled "Let's Talk Low Vision". We are fortunate to have Dr. Bill Takeshita as the moderator and master of ceremonies for these presentations. The presentations occur the third Tuesday of each month and start at 5:30 PM (Pacific), 8:30 PM (Eastern). To be part of the conversation, please call (712) 432-6100 and enter the participant passcode 256613.

July 15: Nutrition and Vision for People with Diabetes

Dr. Bill interviews Natalie Nankin, a certified nutritionist who will talk about the importance of having a proper diet to maximize your health.

August 19: Electronic Book Readers and Tablet PCs

Dr. Bill interviews Brian Albriton and Steve Bauer who discuss the numerous options for people to listen to books on tablet computers and book readers.

September 16: Resources for Students Transitioning From High School to College

Dr. Bill interviews Richard Rueda who talks about the services and programs available to help transitioning students.

October 21: Medical Advancements for Common Vision Problems

Dr. Bill discusses the latest research studies and clinical trials for macular degeneration, diabetic retinopathy, glaucoma, retinitis pigmentosa, and more.
November 18: Strategies to Help Your Friends, Family, and Co-Workers to Understand Your Vision Problems

Dr. Bill shares specific ways that you can help others to understand your visual difficulties and how to let them know if and when you would like assistance.

December 16: How to Manage Your Finances with Low Vision

Dr. Bill interviews a panel of guests who share how they manage their finances, invest, and save for retirement with low vision.

Science and Health

Summary: New Research Sheds Light on How UV Rays May Contribute to Cataract

www.nei.nih.gov/news/briefs/uv_cataract.asp

A new study offers an explanation for how years of chronic sunlight exposure can increase the risk of catarac, a clouding of the eye lens that typically occurs with aging. The study firms up a link between the sun's damaging rays and a process called oxidative stress. It was funded in part by the National Eye Institute (NEI).

It's well known that exposure to ultraviolet (UV) light from the sun can cause skin damage. But many studies show that UV light can also increase the risk of cataract and other eye conditions. Oxidative stress refers to harmful chemical reactions that can occur when our cells consume oxygen and other fuels to produce energy. It's an unfortunate consequence of living, but it's also considered a major contributor to normal aging and age-related diseases, including cataract formation in the lens.

The cells within the lens contain mostly water and proteins, lacking the organelles (literally "tiny organs") typically found in other cells. This unusual make-up of lens

cells renders the lens transparent, uniquely capable of transmitting light and focusing it on the retina at the back of the eye. When a cataract forms, the proteins inside lens cells show signs of oxidative damage, and they ultimately become clumped together, scattering light rather than transmitting it. So, the theory goes, oxidative stress (or something like it) is responsible for destroying the neatly ordered proteins inside the lens and producing a cataract. The theory might sound simple, but there is a puzzling fact that doesn't fit: The oldest cells in the lens are not only devoid of the organelles that keep most other cells alive and functioning, but they also get little to no oxygen. So how can they suffer from oxidative stress?

The new study, led by researchers at Case Western Reserve University in Cleveland, Ohio, suggests that UV light may provide an answer. The study shows that UV light can damage lens proteins in a distinct way (called glycation) that is typically seen in cataracts

and in cells damaged by oxidative stress. In other words, UV light can substitute for oxygen to trigger harmful oxidative reactions in the lens.

Many clinical studies, including an NEI-funded study of fishermen in the Chesapeake Bay, have pointed to UV light exposure as a risk factor for age-related cataracts. UV light rays are invisible and have shorter wavelengths than visible light. In the earth's atmosphere, UV light comes in two varieties: UVA and UVB. Their relative contributions to cataract remain unclear, but UVA penetrates more deeply into the

body and may be more likely to reach the lens. NEI's National Eye Health Education Partnership (NEHEP) recommends wearing sunglasses with both UVA and UVB protection to shield your eyes from the sun. A hat can help, too.

Unfortunately, the researchers found that a natural antioxidant in the eye and other tissues, called glutathione, offer little protection against the damaging effects of UV light. Several clinical studies have tested the potential for antioxidant supplements to prevent or slow age-related cataracts, getting mixed results.

Request for Contributions

CCLVI gratefully accepts contributions from readers and members to help pay for the costs of publishing Vision Access, the costs related to our 800 line and Project Insight, and for funding the Carl E. Foley and Fred Scheigert Scholarships. Please send contributions to CCLVI Treasurer, Mike Godino, 104 Tilrose Avenue, Malverne, NY 11565-2040. Our Tax ID number is 1317540.

Officers and Board of Directors

Officers

President
Jim Jirak,
(1st term ends 7/14)
Omaha, NE
president@cclvi.org

1st Vice President
Dan Smith,
(partial term ends 7/14)
San Lorenzo, CA
1st-vp@cclvi.org

2nd Vice President Donna Pomerantz, (1st term ends 7/14) Pasadena, CA 2nd-vp@cclvi.org

Recording Secretary Lindsey Tilden, (1st term ends 7/14) Vista, CA secretary@cclvi.org

Treasurer
Mike Godino,
(5th term ends 7/14)
Malverne, NY
treasurer@cclvi.org

Immediate Past President Richard Rueda Union City, CA immediatepastpresident@cclvi.org

Board of Directors

Michael Byington (1st term ends 7/15) Topeka, KS michael.byington@cclvi.org

Leslie Spoone (1st term ends 7/15) Orlando, FL leslie.spoone@cclvi.org Grady Ebert (2nd term ends 7/16) Natchitoches, LA

Bianca Knight (1st term ends 7/16) Nashville, TN bianca.knight@cclvi.org

Allen Casey (1st term ends 7/14) Graham, NC allen.casey@cclvi.org

Melody Banks (1st term ends 7/16) Cincinnati, OH melody.banks@cclvi.org

Fred Scheigert (Partial term ends 7/14) Saratoga Springs, NY fred.scheigert@cclvi.org

Charles Glaser (Partial term ends 7/15) Stone Mountain, GA charles.glaser@cclvi.org

Kathy Farina
(Partial term ends 7/14)
Albany, NY
kathy.farina@cclvi.org

Ex-Officio

Vision Access Editor Mike Keithley editor@cclvi.org

Webmaster
Annette Carter
Clovis, CA
webmaster@cclvi.org

Council of Citizens with Low Vision International, an Affiliate of the American Council of the Blind info@cclvi.org | www.cclvi.org | (800) 733-2258 2200 Wilson Blvd., Suite 650, Arlington, VA 22201



CCLVI Membership Application

Name		
Address		
City	St	ate Zip Code
Country	Pho	ne
Main E-Mai	il	
Preferred	l method of	being contacted:
□ Phone	□ email □	large print postal mail
Members	hip Status:	I am
□ New me	mber at large	
□ Renewir	ng member at	large.
□ New cha	apter member	. (specify chapter)
	□ DVCCLV	
		□ NYSCCLV
□ Renewir	ng chapter me	mbership. (specify chapter)
	□ DVCCLV	
□ MCLVI	\square NCCLV	□ NYSCCLV
□ Professi	onal member	of CCLVI.
☐ Life mer	nber of CCLVI	
☐ Life mer	mber of ACB.	

Visual status: I am
□ totally blind □ fully sighted
□ legally blind □ visually impaired
Formats:
I wish to receive the CCLVI publication(s), Vision Access in:
□ Large print □ Cassette □ E-mail
□ Audio CD□ Data CD□ Do not send
Please send the American Council of the Blind ACB Braille Forum in:
□ Large Print □ E-mail □ Computer Disk
□ Cassette□ Braille□ Do Not Send
Payment:
\$ Annual At-Large Dues \$15.00 *
\$ Affiliate chapter dues * (Please visit www.cclvi.org for our 6 local
chapter affiliates or see below.)
\$Life Membership Dues \$150.00 (in full or installments) Can be paid in
three (3) annual installments, plus chapter dues if applicable
\$ Professional membership: \$25.00
\$ Additional Donations
\$ Total Amount

Make check or money order payable to "CCLVI" and send to CCLVI Treasurer: Mike Godino 104 Tilrose Avenue, Malverne, NY 11565-2024 Phone: 800-733-2258

CCLVI Local Chapter Affiliates

CCCLV: California Council of Citizens with Low Vision

CCCLV@cclvi.org

DVCCLV: Delaware Valley Council of Citizens with Low Vision

DVCCLV@cclvi.org

FCCLV: Florida Council of Citizens with Low Vision

FCCLV@cclvi.org

MCLVI: Metropolitan Council of Low Vision Individuals, Greater New York

MCLVI@cclvi.org

NCCLV: National Capital Citizens with Low Vision, Metropolitan Washington

(DC)

NCCLV@cclvi.org

NYSCCLV: New York State Council of Citizens with Low Vision

NYSCCLV@cclvi.org