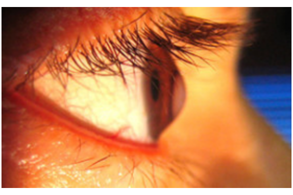
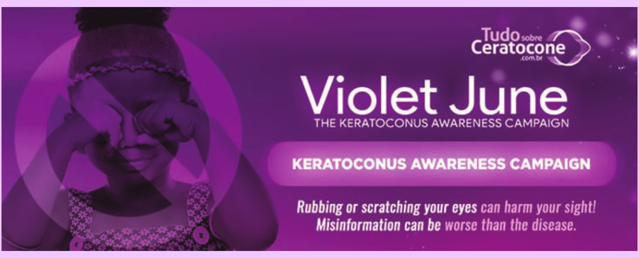
NKCF
National Keratoconus Foundation

May 2021 Update



Get Ready for ... Violet June


Tudo sobre Ceratocone .com.br
Violet June
THE KERATOCONUS AWARENESS CAMPAIGN
KERATOCONUS AWARENESS CAMPAIGN
Rubbing or scratching your eyes can harm your sight!
Misinformation can be worse than the disease.

Raising awareness of keratoconus has gone global! The undeniable leader of this effort is **Dr. Renato Ambrosio, Jr, MD, PhD** of Rio de Janeiro. Dr. Ambrosio is an international expert in the treatment of corneal diseases and recently completed a term as president of the prestigious International Society of Refractive Surgery. He is routinely named to lists of the world's top eye doctors and vision scientists.

Ambrosio's focus and longtime passion is keratoconus (KC). He noticed how the lack of information on KC was causing unnecessary confusion and suffering for his patients and authored a young adult book called "I Have Keratoconus, Now What?!" to help demystify the condition: he named the central character Violet. In 2018, he launched a month-long effort in Brazil to call attention to KC. The color violet, Ambrosio notes, is one that represents healing and transformation.

In an **editorial** he published last year in the academic journal, *Ophthalmology and Therapy*, Ambrosio calls on his medical colleagues to stress the dangers of eye rubbing to their patients with KC, "We, eye care professionals, all need to work together to make our message stronger and more impactful. We need to make it part of our cultural legacy." He adds, "Patient education is a central part of all doctor-patient interactions. Patients have to understand why an intervention is performed."

To learn more, visit the **Violet June** website.

HONOR A DOCTOR

Meet the NKCF Top Docs of 2021:
Dr. David Hardten & Dr. Tiffany Gates

Each Spring, *NKCF Update* readers submit stories about their doctor as part of our celebration of Honor Your Doctor Day. NKCF selects one optometrist and one ophthalmologist to represent the entire group of nominees. Meet this year's Top Docs:

Dr. Tiffany Gates OD treats patients at Visionary Eye Care in Broomfield, Colorado, where she opened a two-doctor office in late 2019. Dr. Gates graduated from Southern California College of Optometry in 2014 and then spent an additional residency year gaining advanced training in cornea and contact lens. Dr. Gates has earned the rank of Fellow in both the American Academy of Optometry and Scleral Lens Education Society, two of optometry's highest achievements.

Patient Alisa G nominated her, "*Dr. Gates takes the time and truly understands the challenges of keratoconus. I was amazed that she ordered new scleral lenses for me that were perfect the first time – no reorders or refitting necessary. I feel very confident in the level of care I get with her.*"

When she learned she was selected as NKCF Top Doc, Dr. Gates responded, "I feel honored to work with patients who trust me to help manage their keratoconus. I strive every day to help my patients see better and to be a caring presence when there is worry. Luckily, we have come so far in understanding how to stabilize and restore vision in patients with KC, the future is bright!"

***

Nearly thirty years ago, **Dr. David Hardten MD**, along with two other doctors founded Minnesota Eye Consultants, now the largest eye specialty group in Minnesota with 28 doctors working across the state. In addition to his busy research and patient care responsibilities, Dr. Hardten shares his expertise with the next generation of eye doctors as an adjunct faculty member at both the University of Minnesota Department of Ophthalmology and the Illinois College of Optometry.

His patient, Amy J, recognized his reputation in her nomination, "*Dr. Hardten is highly regarded in the region as one of the best corneal specialists – yet he is very personable. He makes sure that I leave with no questions. He knows the right level to speak – not talking way over my head, yet by no means condescending. I know I am in good hands.*"

Dr. Hardten summarizes his abiding interest in the specialty, "I enjoy working with these patients because there is so much we can now do for them. Keratoconus is a condition that affects patients at very productive stages in their life and the management strategies we have for them including crosslinking, contact lenses, transplants and Intacs can have a tremendous impact for their function in life."

Two dedicated doctors at different phases in their careers. NKCF is pleased to recognize Dr. Tiffany Gates OD and Dr. David Hardten MD as the Top Docs of 2021. Thank you to our readers who shared positive experiences with their eye doctors. To see the list of all doctors nominated in 2021, **click here**.

Cataracts & KC: Highlights from NKCF Webinar with Dr. Sumitra Khandelwal

In March, NKCF presented an Evening Webinar on the subject of cataracts and keratoconus. More than 850 people listened to the presentation live or watched the recording, making it one of the most successful and informative talks we have presented. **Dr. Sumitra Khandelwal MD**, Associate Professor of Ophthalmology at Baylor College of Medicine in Houston gave a thoughtful overview of the subject. Here are some highlights:

If I have a cataract, do I need to have surgery?

Not necessarily. Eye doctors rate a cataract on a scale from 1-4, and the common treatment is just to observe it for a while to see how it is affecting your life. However, cataract surgery is very safe and a very common surgery. Your doctor will decide with you when the timing for cataract surgery is right.

Do I need crosslinking prior to cataract surgery?

Everybody is different, but usually the answer is 'no' because most patients who are of the age where they come in for a cataract evaluation are in their 60s or 70s. They likely have a stabilized cornea and their keratoconus is no longer progressing.

If your keratoconus is progressing and you do need to have crosslinking, you will likely have it about 6 months before your cataract surgery.

Will my cataract surgery be more difficult because of my keratoconus?

Your surgery won't be more difficult, but it will be different. It is important that your surgeon has an idea about what it means to have keratoconus. It's a different pre-op evaluation, there may be some extra surgery steps; the types of lenses will be different, and the goals might be different. Other patients may have the outcome of not needing to use glasses after surgery, but with keratoconus your expectations need to account for the fact that your cornea is still irregular.

Will I have a choice of an artificial lens when I have cataract surgery?

There are many lens choices available. The most common lens for a keratoconus patient is the aspherical monofocal intraocular lens. These lenses offer some correction for the glare and problems with low light and darkness that many patients experience.

However, everyone is different. You and your doctor should focus on picking the lens that is best for you, your specific eye, and your lifestyle.

In case you missed it, you can **watch the full webinar here**

2021-22 Evening Webinars announced: Mark your Calendar to Attend these Sessions

NKCF is pleased to announce the calendar for the 2021-22 Evening Webinar Series. These sessions are free to subscribers of *NKCF Update* but you must register in advance. If you miss the live event, all of the presentations are archived on our website and can be accessed at any time.

Remember, there is one more speaker scheduled for this year. **Dr. James Loden, MD** of Loden Vision, an eye surgeon in Nashville, TN, will share his experience as a patient when he underwent crosslinking for his own progressive keratoconus on Tuesday evening, **July 13, 2021**.

Register for July Webinar

September 14, 2021 – **Dr. Majid Moshirfar MD**, of Hoopes Vision in Draper, UT will share his expertise on the subject of Corneal Transplants for Keratoconus

November 9, 2021 – **Dr Gregg Pusatari OD,** of the eCenter for Hope and Vision in Eagle River, WI will offer tips on coping with Keratoconus and vision loss

January 11, 2022 – **Dr. Melissa Barnett OD**, of the UC Davis Eye Center in Sacramento, CA will provide an Update on Dry Eye and Keratoconus

March 8, 2022 – **Dr. Stephanie Woo OD**, of the Contact Lens Institute of Nevada in Las Vegas will present Contact Lens Options for Individuals with Keratoconus

May 10, 2022 – **Dr. Michael Greenwood MD** and **Dr. Brooke Messmer OD**, of Vance Thompson Vision in Fargo, ND will solve the mysteries of Crosslinking for Keratoconus: Better With More Bonds

July 12, 2022 – **Dr. Bala Ambati MD, PhD** and **Dr. Sarah Molokhia PhD** of Iveena Delivery Systems in Salt Lake City, UT will describe their novel research, IVMED-85 Eye Drops for Treatment of Keratoconus

Update on Genetics and Keratoconus

In the December 2020 issue of the journal *Cornea*, doctors from France shared results of a study conducted at the KC National Reference Centre in Bourdeaux. They were interested in learning more about genetics as a risk factor for the disease. They wrote, "the prevalence of KC in relatives is commonly considered more important than in the general population and this is all the more if we take into account sub-KC." The study offered patients at the KC Centre the opportunity for close relatives to receive a comprehensive eye exam. 94 patients with KC brought their parents, siblings or children for an evaluation. Of these 221 relatives, doctors found 20 (9%) with undiagnosed KC, and another 31 (14%) with suspected or subclinical KC. ***This study highlights the increased risk that relatives of individuals with KC face.*** The authors of the study cautioned, "we still do not know the relative contribution of genetics, the environment, and behavior (eye rubbing) in the development of KC."

In the US, there is a growing practice to monitor close family members for signs of KC. In addition to a complete eye exam, that assessment may now include the AvaGen Test, a simple genetic test developed with the KC community in mind. **Avellino Precision Medicine** is a California-based company that looks for variants in 75 genes that have been linked to KC and similar cornea diseases. The results from a cheek swab analysis come in a numeric scale that calculates risk of KC as low, medium or high. For families affected by KC who are curious or concerned about other members, test results can provide peace of mind, or an opportunity to act. For doctors, the results can guide the development of individualized eye care plans for at-risk patients.

Your eye doctor can order the AvaGen test kit and help you interpret the results. This test does not take the place of a comprehensive eye exam. Learn more **here.**

Reference: Lapeyre G, Fournie P, *et al,* Keratoconus Prevalence in Families: A French Study, *Cornea*, 39:1473-1479, 2020.

Calling out to our International Friends

NKCF Update subscribers living outside the US should keep an eye out for an email from us asking about organizations in your country that offer support and education to families affected by keratoconus. We are updating this international resource and want to include groups from anywhere that advocate for KC patients. Any information you provide about local resources will help us. Thank you!

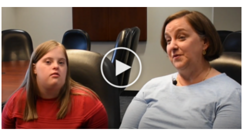
The KC / Down syndrome Connection

Infants born with Down syndrome (DS) face a multitude of health issues, among them eye and vision disorders. It has been speculated that the rate of keratoconus (KC) is higher in the DS community but, because of the unique characteristics of the DS eye, KC is often undiagnosed. Accurate diagnosis and eventual treatment is usually the result of a parent or caregiver observing behaviors that signal vision changes.

The availability of improved diagnostic equipment like Pentacam topography has made getting quick, precise measurements of the cornea simpler. The machine constructs a colorful map of the elevation of the eye. A significant portion of individuals with DS have unusually steep or irregular corneas, two of the common signs of KC. Repeat testing at follow-up appointments can determine if KC is progressing. In the past year, three new studies were published focusing on diagnosing KC in individuals with DS using this technology:

- 98 participants in the New Zealand Special Olympics were screened and the topography results were evaluated by independent ophthalmologists. 39 athletes showed evidence of KC. (40%).
- In a Colorado hospital clinic, 31 children with DS were given a Pentacam scan and the maps reviewed by outside experts. In this small group, 10 patients (32%) were found to have definite or likely signs of KC.
- In Iran, 226 children and young adults with DS between the age of 10 and 30 were given a complete eye exam including a Pentacam study. 28 of these young people (12%) were diagnosed with KC.

Technology that provides quick and accurate assessments of changes to the cornea makes it easier for eyecare professionals to diagnose KC in all patients, and has been especially valuable for patients who find it difficult to assist in their own comprehensive eye exams.



NKCF is helping to spread the word about the KC/DS connection. NKCF recently participated in a panel discussion that also featured the parent of a young adult with DS who underwent crosslinking (CXL) for her progressive keratoconus. You can watch Sarah's CXL story **here.**

NKCF is working with the National Down Syndrome Society to raise awareness. Families affected by DS are encouraged to **sign up for the NKCF pamphlet** "Down Syndrome & Keratoconus" and share the information with other affected families and medical care coordinators.

References:
Mathan JJ, Gokul A, *et al,* Topographic screening reveals keratoconus to be extremely common in Down syndrome, Clin Exp Ophthalmol, 48:1160-1167, 2020.
Imbornoni LM, Wise RE, *et al,* Keratoconus and corneal morphology in patients with Down syndrome at a pediatric hospital, J AAPOS, 24:140e1-e5, 2020.
Hashemi H, Miraftab M, *et al,* Keratoconus detection by novel indices in patients with Down syndrome: a cohort population-based study, Jpn J Ophthalmol, 64:285-291, 2020.

Hope for the Uninsured: Talk to your eye doctor

Millions lost their jobs and their employer sponsored insurance in the past year, and that has crushed many who planned to undergo crosslinking (CXL) for progressive KC. If your doctor has recommended the procedure, but you have no insurance or the resources to pay, ***have a candid talk with your doctor about your financial status***. If you don't raise these concerns, your doctor will assume it is not an issue.

Glaukos, the company that makes the equipment and product for FDA-approved crosslinking, has a generous Patient Assistance Program available to qualified patients. In some circumstances, when your eye surgeon is willing to perform the procedure at no charge, Glaukos will donate Photrexa, the eyedrop solution used in the treatment.

Even if you do not qualify for the Glaukos Patient Assistance Program, the financial counselor in your eye doctor's office may direct you to other local resources that can reduce your costs for this treatment. Speak up! In some cases, there is help available. Learn more about Glaukos corneal crosslinking including their co-pay savings program by visiting **livingwithkeratoconus.com**.

GLAUKOS

New Contact Lens Care Products

Tangible Science, the company that makes Hydra-PEG lens coating has introduced two new products to keep your contact lenses pristine. Hydra-PEG is a polymer (polyethylene glycol or PEG) your doctor can order to be applied to contact lenses during the manufacturing process. Hydra-PEG coating creates a wettable layer on the lens and has been available for GP, scleral, and hybrid lenses since 2017. While the lenses feel slippery to the touch and may take some getting used to - don't handle these lenses over the sink or they may end up down the drain – most patients experience a more comfortable fit when lenses have Hydra-PEG coating, and clearer vision because deposits are less likely to accumulate on the lens surface.

tangible CLEAN
MULTI-PURPOSE SOLUTION
For Rigid Gas Permeable Lenses
Use with tangible HYDRA-PEG
Cleans | Conditions | Rinses
Disinfects | Stores
12 FL OZ (355 mL)
1 Bottle

Tangible Clean is a new multipurpose solution made specially for lenses coated with Hydra-PEG. Cleaning or rubbing treated lenses with extra-strength or alcohol-based cleansers can break down the polymer coating and reduce the benefits of Hydra-PEG. This gentle, low viscous formula can be used to clean, rinse, disinfect and store lenses. Tangible Clean comes in a 12 oz bottle or smaller travel size; your doctor may carry the product, or you can order it from the **dryeyeshop.com** or directly from **tanglblescience.com**. Tangible Clean should not be used to fill the bowl of your scleral lenses.

Tangible Science also recently added another product to its lens care family. Available by prescription (Rx) only, **Tangible Boost** is a monthly conditioning system that rejuvenates Hydra-PEG treated lenses, giving a 'like new' sensation after a 30-minute soak. The Boost formula contains polymers that repair microscopic gaps that develop from wear and restores the Hydra-PEG coating to the original feel. Customers who have used the product report lenses that are several months old get back the wettability and deposit resistance that was present when the contacts were new.

tangible
MONTHLY CONDITIONING SOLUTION
tangible
MONTHLY CONDITIONING SOLUTION

The Tangible System, including Hydra-PEG coating, Clean solution and Boost monthly repair may be just what is needed for those who have been bothered by fogging, deposit accumulation or dry, scratchy lenses. Learn more at **tangiblescience.com** or talk to you eye doctor.

NKCF Update Readers Contribute to KC Research . . .

In 2017, NKCF encouraged *Update* readers to participate in an on-line survey developed by the Scleral lenses in Current Ophthalmic Practice Evaluation (SCOPE) study group. The study was approved by the Institutional Review Board at the Mayo Clinic in Rochester, MN.

More than 400 readers took part. An article in *Optometry and Vision Science* analyzed some of the findings. The authors directly compared the satisfaction of individuals with KC wearing scleral lenses (SLs) to those wearing gas permeable (GP) lenses. The survey respondents included 75 in the GP group and 76 in the SL group. The age range in the GP group was 21-78 (mean age =52) and the age range in the SL group was 15-82 (mean age =48).

Dr. Ellen Shorter, OD, FAAO, Assistant Professor of Ophthalmology at the University of Illinois College of Medicine is the lead author on the paper. She notes that the survey was one of the most comprehensive patient preference surveys of its kind. Among the observations was that the majority of participants ***in both groups*** complained of lens discomfort, (77% of those in GPs and 67% in SLs).

According to Dr. Shorter, both groups reported similar satisfaction with ease of handling. Both groups reported spending an average of 6-10 minutes daily on lens care. She noted one surprising finding, "While fogging is often thought to affect scleral lens users more, both groups reported frequent issues with cloudy or foggy vision." Dr. Shorter summarized, "GP lens wearers reported fewer complaints with glare and halos. Scleral lens users were more satisfied with their overall vision and comfort."

Participation in these surveys informs doctors about expected or unusual experiences for their patients with KC, and helps doctors select among contact lens options to offer patients. Look for another SCOPE survey later this year. To read the article based on the results of this survey, "Keratoconus Patient Satisfaction and Care Burden with Corneal Gas-permeable and Scleral Lenses, **click here**.

Dr. Ellen Shorter, OD FAAO, FSLS is Assistant Professor and Director of the Contact Lens Service at the University of Illinois College of Medicine in Chicago. She is a graduate of the Illinois College of Optometry and a Fellow of the American Academy of Optometry and Scleral Lens Education Society. She is a SCOPE study group member and specializes in fitting medically necessary contact lenses for patients with irregular corneas including keratoconus.

Physician/Patient Relationships: Participate in a new Survey

You are invited to share your opinion

Dr. Melissa Barnett, OD, FAAO, FSLS, contact lens expert and principal optometrist at the University of California, Davis Eye Center and colleagues from Portugal and Italy are conducting a patient survey that will provide insight into the doctor/patient relationship.

If you have already participated, **Thank You**! If not, please take five minutes and complete this short survey. One of the goals is to identify key factors that result in effective communication. The researchers hope to learn what patients' value, and if those elements vary from one country to another. Your opinion about what works in the doctor/patient relationship, as well as the opinions of other patients, will help make a world of difference to eyecare professionals.

Take The Survey

What happens after CXL? Results from an *NKCF Update* Survey

In the February *NKCF Update*, we asked those who had corneal crosslinking (CXL) about their experience. Seventeen people responded. We thank them for sharing their opinions. Nine were male (52%); seven were under the age of 30. Thirteen had the procedure in the US. The earliest was treated in May 2011 and the latest in August 2020. Eleven reported they had the epi-off procedure (64%), five had epi-on (29%) and 1 was unsure of the protocol used.

While eye surgeons recommend pain-killers or prescribe medication to minimize post-operative discomfort, many prospective patients are concerned about pain associated with CXL. The cornea is the most densely innervated tissue in the body: pain can be powerful but is generally short-lived. Indeed, ten of our respondents (59%) said they experienced intense pain for the first day following the procedure and four (23%) described intense pain lasting 48 hours. Patients whose epithelium was left intact (epi-on) did not report any less pain that those who had the epithelium removed (epi-off). In fact, of the three subjects who reported the lowest levels of pain ("mild irritation" or "mild pain"), one had epi-on and two had epi-off CXL. These results mirror published studies. In a Mexican clinical trial comparing pain management therapies, patients completed a survey immediately after CXL and daily for the next several days. In that study, patients who underwent either epi-on or epi-off CXL complained of significant pain immediately after the procedure but noticed the level of pain decreased each day, until day 5 when it became negligible.

In the *NKCF Update* poll, respondents were asked to assign a number to the overall experience, with 5 being the most satisfied and 1 the least satisfied.

Eleven (65%) gave the experience a score of 4 or 5. Eight of these patients had the epi-off procedure and three had the epi-on protocol. Two reported that their vision stabilized in less than a month and six described vision stabilization between 1-4 months.

Of the three (17%) people who scored their experience 1 or 2, two had epi-off and one had epi-on CXL. Two reported their vision stabilized in less than 1 month and one reported that vision took 8-12 months to stabilize.

Doctors tell their patients that CXL is performed to stop the progression of KC, but many patients expect vision improvement as evidence of success. In the comment section, some who gave the experience a higher overall score reported their vision had improved ("I no longer need correction to achieve functional vision"). Others who were satisfied wrote that CXL reduces uncertainty ("I have hopes that the procedure prevented me from having a corneal transplant later"). Another wrote, "Do it sooner than later. You won't regret it."

Those who are less than satisfied with the experience had comments like, "It doesn't work for everyone," and another, "Does not work. Still can't see without gas perm lenses."

The unhappiest were not those who suffered the most pain, or had long periods of unstable vision. They were not older or younger; or those who had epi-on or epi-off. Our survey could not identify a single factor that caused a patient to be more or less satisfied with the experience. Perhaps one individual expressed the most astute comment with the observation, "The procedure is necessary to arrest KC progression, so without thinking whether you like it or not, just go with your doctor's advice."

Reference: Serna-Ojeda JC, Santana-Cruz O, *et al,* Pain Management in Corneal Collagen Crosslinking for Keratoconus: A comparative Case Series, J Ocul Pharmacol Ther, 35:325-330, 2019.

eCenter for Hope & Vision offers support for those with vision loss

One of the speakers in the 2021-22 Evening Webinar series is **Dr. Greg Pusateri, OD, MDiv** of Eagle River, Wisconsin. Dr. Pusateri has an unusual background. An ordained minister with a focus on Pastoral Care, he is also graduate of the Illinois College of Optometry and a highly respected specialist in low vision rehabilitation. Many patients referred to him live with traumatic injuries or inherited eye diseases that result in permanent loss of vision.

Dr. Pusateri realized much of the therapy he provides need not take place in an exam chair, so he opened a 'virtual office', the eCenter for Hope and Vision to assist patients living remotely lead more productive and independent lives.

Using his optometry background, Dr. Pusateri provides low vision rehabilitation training, including use of accessibility features on smartphones, tablets and computers, and training in low vision devices. His theological background is at the core of the counselling and compassion he offers patients. For individuals struggling with their vision problems, Dr. Gregg may offer a path to coping and thriving. To learn more, visit the eCenter for Hope and Vision **website here**.

NKCF
National Keratoconus Foundation Presents
CHANG
REACTION
PODCAST, featuring DR. CLARK CHANG

Have you heard the latest from NKCF?

NKCF has started a monthly broadcast called **Chang Reaction**.

Dr. Clark Chang, OD a noted keratoconus expert and friend of NKCF answers submitted questions about all things keratoconus. Dr. Chang is Director of Specialty Contact Lenses on the Cornea Service at Wills Eye Hospital in Philadelphia, and a member of the medical affairs team at Glaukos.

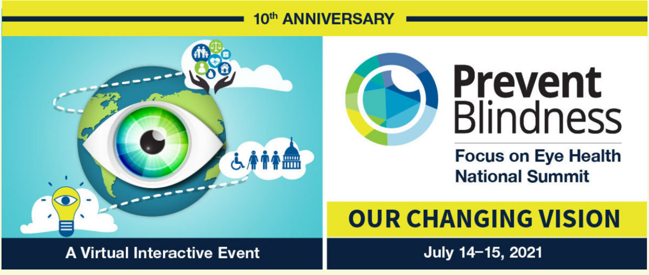
On the first of each month, a new episode is uploaded and can be found in the webinar section of the **NKCF website.** The series is a nice complement to the live Evening Webinar series. Chang Reaction is a taped mix of opinion and tips, with questions as diverse as "Can I particpate in sports like wrestling?" to "Why do my contact lenses always fog up?".

If you have a KC-related question that you would like answered in a future episode, submit your question **here**.

Register to Attend the Prevent Blindness Focus on Eye Health National Summit

NKCF is a sponsor and participant in the Focus on Eye Health National Summit, hosted by Prevent Blindness. Normally held in Washington DC, this year's event is 'virtual' so the public can register and attend sessions without leaving home. The Summit will take place on July 14-15, with a variety of speakers and topics addressing this year's theme, "Our Changing Vision."

The agenda reflects on vision advancements from the last 10 years and looks ahead at policies that will shape how we approach eye health in the coming decade. Keynote speaker on Thursday, July 15 will be Amy Dixon, an elite athlete currently training for this summer's Tokyo Paralympic Games. Dixon's talk, "Adversity is My Super Power" will touch on her life with vision loss. Other featured speakers include policy makers, scientists and clinicians. NKCF will have a booth in the 'virtual exhibit hall' and invites NKCF readers to stop by and chat. For more information or to register for the Focus on Eye Health National Summit, visit **PreventBlindness.org**



NKCF Specialist List

NKCF now provides direct links to the websites of the 394 eyecare professionals are members of our NKCF Referral List. NKCF provides this resource without specifically endorsing any doctor or practice. Ophthalmologists, optometrists and opticians must enroll in the NKCF referral program and must meet our training and education standards. We encourage our readers to find local experts who have experience managing keratoconus and who can communicate effectively with their patients. To view the NKCF Experts, click **here**.

Thank you to friends of NKCF who contribute to our programs. We are grateful for your support. Click below to make an easy, on-line donation to UCI Giving. A gift of any size makes a difference!

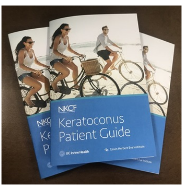
I SUPPORT NKCF

One last thing: Here is your NKCF "to do" list

Today: Take the mini-survey on Doctor/Patient Communication.

June 1: Watch the latest episode of Chang Reaction featuring Dr. Clark Chang answering your questions about all things KC.

This week: Did you miss Dr. Christine Sindt's outstanding Webinar on May 18? Watch a recording on the NKCF website and understand what your doctor hopes to learn from you during an eye exam.
During June: Celebrate Violet June, the Global KC Awareness campaign on your social media platforms. Like @junhovioleta on Facebook.
July 1: Watch the latest episode of Chang Reaction featuring Dr. Clark Chang
July 12: Listen to ophthalmologist Dr. James Loden, MD discuss his turn as a patient when he underwent crosslinking for progressive KC on NKCF Evening Webinars (Registration required).
July 14-15: Take part in the Focus on Eye Health National Summit hosted by Prevent Blindness. Visit the NKCF exhibit booth for a free gift (Registration required).



Share the Knowledge

Take the time to educate yourself and others. NKCF sends the 22-page book, ***Keratoconus Patient Guide*** for free to US residents. You may want to share the book with teachers, employers or family members to help them understand some of the challenges you are facing. If you are interested in receiving a copy, request one by visiting our website, **nkcf.org**. We are grateful to ***Glaukos*** whose unrestricted educational grant supports printing and postage for these materials and whose ongoing support of the keratoconus community is appreciated.

NKCF Update

is sent to you compliments of the National Keratoconus Foundation, a program of the Gavin Herbert Eye Institute at the University of California, Irvine.

Email your general questions about KC from our website, www.nkcf.org, or leave a phone message at 800-521-2524.

NKCF does not provide medical advice, medical consultations, or financial assistance. If you have specific questions about your diagnosis, treatment, or outcomes, please contact your eyecare professional.

National Keratoconus Foundation is an outreach program of the Department of Ophthalmology at UCI. .
nkcf.org | 800 - 521 - 2524

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