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The Art of GP Contact Lens Fitting for Presbyopia

by Eef van der Worp, BSc, FAAO, FIACLE

Multifocal contact lenses have a big potential in the eye care practice as many contact lens wearers who become presbyopic are looking for alternatives to glasses. This is especially so for previous contact lens wearers who may perceive eyeglasses as a step backward from their previous vision correction. Unfortunately, there remains the misconception that multifocal and bifocal contact lenses do not work well and may be difficult to fit.

In actuality, GP multifocals and bifocals are relatively easy to fit today with many designs, options, and fitting techniques available. The challenge is how we manage all of the GP presbyopic correction options available to get the right design for the right patient. Presented here is an overview of some important principles in presbyopic GP fitting, along with a simple step-by-step process to help the contact lens practitioner make appropriate decisions.

Eef van der Worp

continued on page 2

Did you know?

- The diameter range of Boston XO® has been expanded due to the growing interest in large diameter specialty fitting. Boston XO buttons are now available in diameters of 17.0mm, 21.0mm, 25.0mm, and the standard diameter of 12.5mm.
- The GP Lens Institute is offering a toolkit containing useful presbyopic fitting information. *Rx for Success, Building Your Practice with GP Bifocals and Multifocals* contains sample patient brochures, a reading card, cards on presenting Presbyopia options to patients, and a CD with many tools for promoting and fitting presbyopic lenses. Visit the GPLI website at www.gpli.info for more details.

- Bausch & Lomb Boston ES®, Boston EO®, and Boston XO® have received FDA indications for the fitting of irregular corneal conditions, such as pellucid marginal degeneration, or following penetrating keratoplasty or refractive surgery. The lens diameter for these indications extends to 21mm.

A Life Restored through GP Technology

by Andrew White, North America Regional Sales Manager, Bausch & Lomb Incorporated

Karen Standing from Toronto, Canada is a vibrant, energetic woman in her early 40s. Karen's biggest problem in life was her vision which was getting worse every year. Her prescription glasses would last her only six months before she could no longer see. She was frustrated at the lack of an answer for her poor vision.

Andrew White, North American Regional Sales Manager

Two years ago, she was finally diagnosed as having bilateral keratoconus and was fit with corneal GP lenses. After about a year, she could no longer see with those. She had now reached a crossroads in her life.

Karen was an advertising executive with several years at the same firm. Without her vision, she could no longer work and was forced to quit her job. After three months, her long-term disability benefits were terminated by the employer's insurance company. She was now forced to apply for government social assistance and the $400 a month it offered.

Confined to her home, she had now completely lost her independence. People from work stopped calling as did some of her friends. She

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Step 1: Multifocals or Not?

I prefer to use the term multifocal when describing either bifocal or multifocal designs and will do so in this text unless specifically stated otherwise.

About half of the vision care population is presbyopic, so there is hardly any need for a discussion on the need for presbyopic corrections. In fact, many multifocal contact lens wearers report how satisfied they are to be the only ones in their community who are able to read without glasses.

Monovision is often regarded as a first option; for some beginning presbyopes this can be a good first step. Simply adding +0.50D to one (usually, but not necessarily, the dominant) eye will aid the presbyope in doing near work. However, practitioners should ensure that their patients are aware of this "system," the progressive nature of presbyopia and the need for further contact lens adjustments in the (near) future. At some point in time, monovision will not provide satisfactory visual results for many patients. There seems little doubt among eye care practitioners and in the literature about the superiority of multifocal lens designs in both hydrogel and GP lens wear over monovision.

Step 2: GP versus Hydrogel

There are many variables that need to be considered when deciding on GP lenses or hydrogels. Importantly, much more so than in single vision fitting, the contact lens practitioner must be in charge of this decision-making process.

There is a mental checklist that I use when deciding whether GP or soft lenses are the best presbyopic choice for an individual patient and this is recapped in Table 1.

In general, GP lenses offer excellent vision while providing a safe ocular environment for contact lens wear.

	HYDROGEL	GP
VISION		
High visual demand	—	+
Contrast sensitivity	—	+
Complex cornea shape	—	+
PHYSIOLOGY		
Poor quality tear film	+/—	+/—
Hypoxia	+/—	+
Extended wear	+/—	+
OTHER FACTORS		
Dusty environment	+	—
Emmetrope, low distance Rx	+	—
Cost	—	+

Table 1. GP vs. Hydrogel lens selection checklist

For GP lenses, the most critical question that can and should be answered is whether a simultaneous or translating design is best for the patient. This can be decided upon based on several variables, but visual requirement is by far number one.

Step 3: Simultaneous or Translating?

In situations where GPs appear to be the best choice, there are a few additional decisions that need to be made as demonstrated in Table 2.

Typically, simultaneous systems are truly multifocal, while translating systems are considered bifocal. However, a number of translating designs offer multifocal vision as well.

For GP lenses, the most critical question that can and should be answered is whether a simultaneous or translating design is best for the patient. This can be decided upon based on several variables, but visual requirement is by far number one. The basic decision is fairly simple: if good and stable vision is required for far and for near, a translating system is the first method of choice. If flexible and good intermediate vision is required, simultaneous is the better choice.

Multifocal lens fitting often relies on flexible and creative lens fitting, including combining different lenses or methods. Modified monovision, for instance, is an excellent way of expanding your options. However, one should avoid combining simultaneous and translating systems on the same patient: essential differences in optics could result in optical confusion.

Step 4: Different Designs

Once the decision has been made, it's time to fine-tune this choice. Within the system that has been chosen there are a number of possibilities (Figure 1, page 3 & Figure 2, page 4).

Simultaneous

The term "simultaneous vision" is a bit misleading. Two (or more) images are projected on the retina simultaneously (not necessary

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	Simultaneous	Translating
Computer use	35% >	< 35%
Work tasks	Midrange	Far–near
Sport	Midrange	Far–near
Hobbies	Midrange	Far–near
Age	< 55 / Low add	> 55 / High add
Contrast sensitivity	Good	Better
Pupils	5mm <	5mm >
Lens comfort	Normal	> Awareness
No previous GP wear	Better	Good
Lens movement	Limited movement	Must move
Topography	Centration essential	Centration desired
Astigmatism correction	Many options	More options
Corneal sensitivity	Low e-value only (BS)	Low & high e-value
High myopia	Possible	Limited
Dk/L	Better	Good
Tear film quality	Less important	More important
Lid position (rotation)	Limited influence	Greater influence
Eyelid shape	Limited influence	Greater influence
Eyelid location	Limited influence	Greater influence
Aperture size	Limited influence	Greater influence
Head position, reading	Any	Only on down gaze
Practitioner cost	Moderate	Higher
Fitting process	Less challenging	More challenging

Table 2. Simultaneous vs. Translating design selection points

all clear), but only one is clear to the patient. Simultaneous lenses are typically aspheric or concentric. The first one is by far the most popular, but both systems will be covered in this discussion.

Simultaneous lenses are very user friendly, easy to fit, relatively inexpensive and popular, with success rates up to 75% not uncommon. In general, a simultaneous lens is the ideal lens to start with—both for the beginning presbyope and for the beginning practitioner. It should be fitted when critical vision is not required. For prescriptions with higher add powers, simultaneous designs may have their limitations and translating designs should be considered.

Aspheric

Aspheric lenses can be subdivided in two main groups: front and back surface geometry. The add power increases towards the periphery, which effectively means that all aspheric GP multifocals are center distance (CD) designs. They are also true multifocals, not bifocals. Be aware that the maximum near addition values provided by the manufacturer cannot always be reached.

Back surface aspheric

The back surface of this lens has a prolate shape, flattening towards the periphery and thus adding plus power. This peripheral flattening should be compensated by fitting the lens quite steep, otherwise the lens would be far too flat. But high aspheric lenses on relatively low eccentricity corneas (fitted 2D, 3D or even 4D steeper than k following the manufacturers' guidelines) could lead to severe corneal distortion. Fortunately, newer lens designs only need to be fitted approximately one diopter steeper than k.

Regular topography measurements are required with back surface aspheric multifocal lenses and the practitioner should be aware of any signs of spectacle blur. In the author's opinion, spectacle blur due to cornea changes should be avoided, if possible. Other alternatives should be considered for those patients continuously showing unwanted cornea changes from back surface aspherics.

Front surface aspheric

Front aspheric lenses do not rely on the asphericity of the cornea, since the back surface is fit as with any spherical GP design. The front surface progressively becomes steeper towards the periphery (oblate shape), creating an increasingly progressive reading addition. Unwanted corneal changes are usually not an issue with this style of aspheric.

Concentric

Also belonging to the simultaneous group but less common in everyday practice is the concentric lens design, often called "annular." It employs two distinct zones; the central zone can be created for either reading (center near or CN) or for distance (center distance or CD).

To confuse things a bit: there are also concentric translating designs. In fact, the concentric simultaneous designs might benefit from translating as well. But the aim with these simultaneous lenses is to fit them well centered on the cornea, not relying on the lower eyelid. Translating multifocals on the other hand aim to move significantly, rest on the lower eyelid, and should translate. Down gaze is essential with translating lenses, which is less of a necessity in simultaneous concentric lenses.

Translating

Segment Design

Different segmented bifocal designs are available with slightly different characteristics. What all of these designs have in common is that their visual performance is excellent. The long line/executive segment bifocal is probably the most widely used lens, followed by crescent segments and D-shaped segments.

The major advantage that GP lenses have over most hydrogel contact lenses, intraocular lenses, and refractive

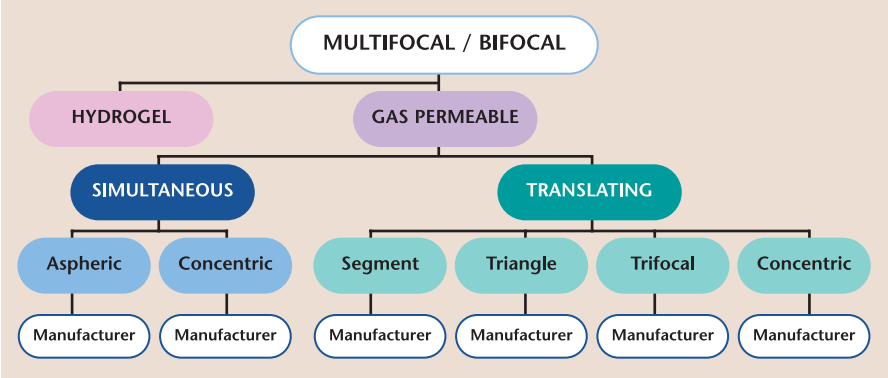


Figure 1. Presbyopic lens design options

surgery procedures is that they are capable of alternating (often used as a synonym for translating) and use different optics for different tasks, very similar to spectacle glasses. The goal is to create a situation where upon down gaze most of the reading section (not necessarily all of it) is in front of the pupil, while in primary gaze the pupil is minimally bothered by the near segment. They are particularly suitable for presbyopes with reading additions over +1.50D and/or those who require excellent near vision performance in general. Reading additions up to +3.50 are promised and with this lens design are indeed feasible. They are fairly pupil independent, as long as the overall diameter is increased accordingly.

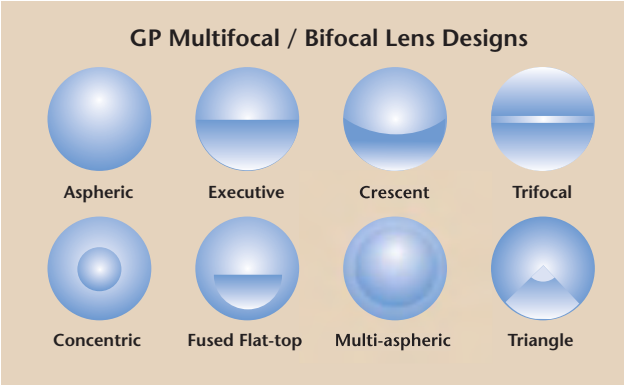


Figure 2. Graphic demonstration of various styles of GP Multifocals/Bifocals.

All translating lenses except some of the concentric designs require stabilization, usually with prism ballast. Bear in mind that prism ballast works according to the watermelon seed principle, not by gravity. The upper eyelids play a crucial role in stabilizing this design by squeezing the thinnest (apex) portion of the lens, thus driving the lens downward. While these designs are not difficult to fit, it may be challenging to predict how a lens will perform on-eye, although this is generally a little easier in existing GP lens wearers. Evaluation of the on-eye rotation is essential. Crescent-shaped segment designs can reduce some of the rotation-associated visual problems as the segment "swings" around the lower pupil margin during the blink cycle.

Triangle

The triangle-shaped translating multifocal is a monocentric lens design with the optical zones cut on the front of the lens. This design, developed in the Netherlands, incorporates a spherical distance zone, spherical near zone and a triangle shaped aspheric intermediate zone.

In contrast with straight top translating lenses, less translation is necessary, so with less movement the desired effect will be reached (28% less movement according to the manufacturer). This suggests that the amount of prism can be reduced and relatively large diameters can be used. This design appears to be less pupil diameter dependent than straight top multifocals.

Trifocal

For patients who desire intermediate vision (such as computer workers) together with high near and far demands, this design or the triangle shaped lens are the options to consider. True bifocals are just what they are: bi-focals. Trifocal designs offer the option to deal with the intermediate distance. It should be noted that this usually works only with small pupils, since the intermediate zone is commonly only 1 mm wide, and good centration is more critical than with normal multifocals.

Some of the true executive/long line bifocal designs also have an intermediate zone at the transition from distance to near. However, this should be regarded as a transition zone indeed, not providing a tri- or multifocal effect.

Concentric

As mentioned, concentric lenses (also known as annular designs) are slightly different, since they can work as either simultaneous or translating. The central zone of a translating concentric lens is larger than the central zone in a simultaneous concentric lens, and this type of lens should move easily over the cornea during blinking to allow translation to take place.

In concentric translating designs, the center part is always for distance, the periphery for reading (remember, concentric simultaneous lenses can be both CN and CD). In some of these designs, you order the size of the central zone according to your desires; others have this zone diameter related to the amount of add power needed.

Bear in mind that prism ballast works according to the watermelon seed principle, not by gravity. The upper eyelids play a crucial role in stabilizing this design by squeezing the thinnest (apex) portion of the lens, thus driving the lens downward.

Step 5: Manufacturer

Once a lens type and design have been selected for the patient, a manufacturer should be chosen. This choice may be based on their product offerings, but consideration should be given to the level of consultation offered. GP laboratories have excellent presbyopic lens consultants who are very experienced in many of the fitting challenges that practitioners face. Use them—they can definitely help increase your success with these lenses.

The number of GP lens designs for presbyopia available worldwide is quite large; thus it is impossible to cover all of the lenses in this article. However, all lens designs can be classified according to the descriptions presented here, making it easy for the practitioner to categorize the multifocal/bifocal lenses available. The GPLI in the USA has a website (www.gpli.info) where all available lenses are listed and one can search by manufacturer, lens design or brand to find what you need. This site is quite helpful and provides many useful tools for your presbyopic contact lens practice.

could not watch television, read, or even go out for a walk unaccompanied. She needed a cane to navigate her way around the house. Karen took phone messages on a big piece of white cardboard with a black marker. She would then have to read each digit with a magnifying glass.

In October of 2005, I received a letter from Dr. Karen Wilson, a noted Toronto optometrist and excellent GP fitter. She was the first person to correctly diagnose Karen Standing's keratonconus. The letter was a request for financial assistance to permit Karen Standing to travel to Boston for further treatment. Dr. Wilson had decided that before resorting to corneal transplants, she would write Dr. Perry Rosenthal at the Boston Foundation For Sight. Dr. Wilson had heard of Dr. Rosenthal's pioneering work with diseased corneas and felt a consult would be appropriate to see if Karen could be fit with scleral contact lenses. An appointment was set for November.

I contacted Karen Standing for the first time to advise her that Bausch & Lomb would provide a travel grant and then arranged her travel to Boston, complete with an escort to walk Karen through ticketing, immigration, and finally to her seat on the plane.

On November 20, Karen called me from Boston. She had been successfully fit with Boston GP Scleral lenses and had 20/40 vision! She had also spent several hours learning proper insertion and removal techniques and how to care for her lenses with Boston Solutions. It takes practice inserting and removing a 17–20 mm rigid lens, and according to the Foundation, Karen was one of their best pupils! Karen flew home that week able to resume her life once again.

I recently met Karen for coffee. She wanted to meet me in person to thank me and the Corporation for the support we provided. Three months ago, Karen was confined to her home with no vision, little income, and an uncertain future. Today, she was confidently driving her own car into the coffee shop parking lot.

We talked for 20 minutes or so. She was very excited about visiting her grown children later that day, and lining up job interviews. Her life was back on track.

As we prepared to leave, she gave me a small gift as a token of her appreciation. I thanked her and wished her all the best in the days and months ahead. As I watched her drive away, I realized she had already given me something more important than the package in my hand. She had allowed me to see first-hand how our products, in the hands of exceptional clinicians, can change someone's life forever.

The Boston Foundation for Sight is a non-profit organization founded by Boston area ophthalmologist Dr. Perry Rosenthal. Visit them at their website: www.bostonsight.org.

Alex Cannella Retires

Dr. Perry Rosenthal and Alex Cannella at Alex's farewell reception in Boston

After a very distinguished 27 year career in the optical field, including nearly 18 years at Polymer Technology, a Bausch & Lomb company, Alex Cannella bid farewell to the industry and officially retired on March 3rd, 2006. As Global Professional Services Manager, Alex oversaw development of all educational programs devoted to GP fitting, assisted with new product introductions, presented at leading industry meetings, put on training programs for fitters and lab personnel around the world, and was Chief Editor of the ***Boston Update Newsletter*** since its inception in July 1998. In 2005, Alex was honored by his industry peers with receipt of the Contact Lens Manufacturers' Association prestigious Trailblazer Award, recognizing him for his years-long work of furthering the knowledge of GP fitting.

Alex's co-workers and colleagues celebrated his accomplishments and expressed their appreciation for his tireless devotion to the company and industry with a farewell reception on February 22nd, 2006 in Boston. Alex is looking forward to spending more time with his wife Wendy and pursuing his many interests, including gardening, traveling and golf.

Alex Cannella, RN, FCLSA, addressing attendees at GOS 2004, Toronto

Presbyopia Fitting Strategies

Bausch & Lomb, in conjunction with the Boston Authorized Laboratory network, is presenting "Presbyopia Fitting Strategies," a series of CE dinner meetings across North America focusing on GP multifocal and bifocal contact lenses. GP fitting experts such as Dr. Keith Ames, Dr. Stephen Byrnes, Eef van der Worp, and others will discuss the important role gas permeable lenses play in managing the visual and lifestyle needs of the presbyopic patient. Please contact Doreen Gaede at Bausch & Lomb, 800-336-6974 x5981 (Doreen.M.Gaede@bausch.com) for more information or to register for a meeting near you.

The Lean Journey

by Ken Harty, Operations Manager, Wilmington Facility, Bausch & Lomb Incorporated

It's hard to believe that almost two years have passed since we began our journey. It was back in May 2004 when we were first exposed to the concept of "Lean Manufacturing," and recognized its potential for improving our operations. Since that initial training, we have worked diligently to adopt and implement lean principles throughout our organization. The manufacturing operations here in Wilmington have changed dramatically for the better as a result of our efforts. I'd like to share with you some of the successes we've achieved to date.

The first principle of lean manufacturing states: *"value can only be defined through the eyes of the customer."*

Over the past two years we've spent considerable time working to identify additional value-added activities that we could offer to our customers. As a result, we have expanded product/service offerings in a number of areas. These include the availability of larger diameter buttons (17 mm & 21 mm), buttons with pre-machined 12.7 mm shoulders, custom blank dimensions, an expanding range of fenestration options, customer specific packaging, and GMP/ISO compliance guidance/assistance. Going forward, we are committed towards identifying and offering additional value-added features for our customers.

The second principle of lean manufacturing states: *"once value is identified, make it flow through the organization."*

It is perhaps in this area where we have implemented the most dramatic improvements. We measure flow through the organization using three key measures:

Velocity – defined as the average time to completely process one batch.

Lead Time – defined as the ratio of inventory to average demand.

Inventory – simply the dollar value of inventory within the facility.

Measure	Gain
Velocity	49% Increase
Lead Time	29% Reduction
Inventory	24% Reduction

When we look back to 2004, we see a manufacturing operation characterized by large batches (20,000 buttons) being processed through a large number of discrete operations, each operating independently of one another. As you may expect, it took quite a bit of time to completely process one batch, which led to excessive lead time and high inventory costs.

Through the implementation of lean principles, the manufacturing operation has been completely transformed into one characterized by much smaller batches processed on a continuous flow through only value-added operations. As a result, we've realized significant gains in all three measures.

Boston buttons *kanban* rack

Although the gains have been impressive, we believe we can accomplish much more as we continue to become more knowledgeable in applying more advanced lean concepts.

The third principle of lean manufacturing states: *"once value is flowing, pull it through the operation."*

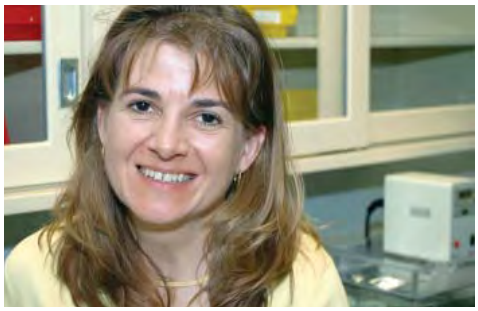
This principle means that customer demand (placement of an order) should be the trigger that drives the manufacturing operation. You may be thinking that this concept is nothing new; however, most manufacturers today utilize some form of scheduling, typically based on customer forecasts/demand planning, to drive their operations. This widespread practice is not consistent with the lean principle. Only the actual placement of an order is an acceptable trigger.

In late 2004, we instituted a kanban replenishment system to manage our inventory. This lean technique allows for customer orders to directly trigger upstream manufacturing operations, thus eliminating the need for a daily/monthly manufacturing schedule. We have been operating ever since without the benefit of a planned schedule, and even though our inventory levels have declined, we have still maintained our commitment to same-day shipment of all standard customer orders.

Although we've realized considerable operational improvements over the past two years, perhaps the most exciting change has been to our organizational culture. All of the employees in Wilmington, from the manufacturing operators to senior management, have embraced the lean philosophy and it is becoming more and more apparent as we go about our daily activities.

The use of lean terms such as *takt time, muda, value stream maps,* and *kaizen* have become part of our everyday vocabulary. We are actively using these and other tools to improve all aspects of our operations. We have begun applying these concepts outside of the manufacturing arena. Lean techniques have been utilized in our Quality Control, Quality Assurance, Purchasing, and Customer Order/Delivery areas to transform and improve many of our administrative operations.

We've accomplished quite a bit in the past two years, although we are still just novices in terms of lean implementation. Though we have a long way to go in terms of becoming a mature lean organization, we are firmly entrenched on the path and are excited about continuing our journey.



Spotlight on Marianne Yarmey

For this issue's Spotlight, we spoke with Marianne Yarmey, PhD, Manager of New Business Technologies. Marianne has been with us since 1999.

How would you describe your work in Wilmington? What are your responsibilities?

As the Manager of New Business Technologies, I play a strategic role in identifying and developing new GP materials to meet customers' needs. I work closely with the GP marketing and sales groups to better understand what our labs and their customers are looking for in the next generation GP material. With that understanding, I collaborate with the R&D scientists in the B&L Corporate R&D group to come up with a new material that will satisfy these needs. Once a prototype is chosen, I facilitate the development, scale-up and manufacturing transfer of this new material. I also try to stay abreast of what our competitors are doing by conducting patent searches and rigorously analyzing our competitors' materials. I feel very lucky to be able to use my technical expertise in Polymer Science to develop new GP materials under the Boston brand.

What is your background—where did you grow up, where did you go to school, and what were some of your experiences before coming to B&L?

I grew up in the Big Sky State of Montana on a wheat farm, the middle of three children. My parents, neither of whom went to college, instilled in me the importance of an education, believing that this was the key to being independent and successful in today's world. Therefore, after high school, I attended the University of Montana and graduated with a B.S. in Chemistry in 1984.

Following my interest in science and the adventure of new discovery, I landed an R&D Scientist position at the Eastman Kodak Company in Rochester, New York. Although it was a long ways from home, I ventured across the country in hopes of finding a career path that would be challenging and rewarding. It was here that I was first exposed to the world of Polymer Science and decided to pursue a graduate degree in this field. I attended the University of Massachusetts at Amherst and received my Ph.D. in Polymer Science and Engineering in 1996. After graduation, I returned to the photographic industry and joined the R&D Division of the Polaroid Corporation in the Boston area. As Polaroid's profits dwindled, I decided that it was time to move from a commodity-driven industry to the higher-margin, medical device industry. Bausch & Lomb was a perfect fit since it was the market leader in GP technology and I have worn GP lenses myself for over twenty years. I was very interested in learning about the technology behind those GP lenses that had served me so well over the years. I also believed that with my materials background, I would have the opportunity to advance the GP technology even further for the next generation of GP wearers.

Where do you think the GP industry is headed? What, do you think are the most interesting changes that we should anticipate in the future?

As the baby boomer generation gets older, wettability of GP lenses will become increasingly important since a person's eyes generally become drier as they age. Enhanced wetting characteristics may come from highly wettable monomers added to the bulk GP matrix or they may be introduced through hydrophilic (water-loving) monomers chemically grafted to the surface of the lens. In addition, GP materials with a high refractive index will also become increasingly important since more add power can be obtained at the same lens thickness for the presbyopic prescription. Now that I am reaching the age where presbyopia is starting to set in, I have even more incentive to design new materials with the properties necessary to allow people who have worn GPs most of their lives to continue to wear their lenses well into middle age.

When not at work, how do you spend your time? What are your hobbies or interests?

I currently live in the picturesque town of Rockport, MA, which lies right on the Atlantic coast. When I'm not at work, I love to be outdoors. Rockport provides that perfect venue for competitive sailing in the summer. Every weekend, my husband and I race our Flying Scot on Sandy Bay. In the winter, we love to downhill ski in the mountains of Maine and sometimes take a trip out West to ski the powder. Hiking usually takes up much of our spring and fall. I also like spending time with family. Unfortunately, my family is scattered across the country, but I am lucky to have most of my husband's family living nearby.

The Lean Vocabulary

Kanban, a Japanese word for signal, is one of the primary tools of a just-in-time system. It signals a cycle of replenishment for production and materials to maintain an orderly and efficient flow of materials throughout the entire manufacturing process.

Muda is a Japanese term for waste.

Kaizen is a Japanese term that means continuous improvement.

***Takt* Time** is from the German word for a conductor's baton *Takt*. Lean Production uses Takt Time as the rate at which a completed product is finished. If you have a Takt Time of two minutes, that means every two minutes a complete product, assembly, or machine is produced.

Value Stream Mapping is a paper and pencil tool that helps you to see and understand the flow of material and information as a product or service makes its way from receiving of raw material to delivery of finished goods and is used to identify where to focus future projects and improvements.

Around & About

Educational, Informational, and Marketing News from Bausch & Lomb Incorporated Boston Products Group

(Above) Charles Di Natale and optometrists of the Hong Kong Hospital Association, Dec. 2005.

(Left) Dr. Igor Lychkanets, his wife Svetlana, and Marcel Kopito at the Doctorlens booth at Optic Moscow (MSOO), March 2006.

(Above) Jim Lunkley enjoying dinner with Bonnie Wan and Addison Cheung of E&E Optics Ltd. in Hong Kong.

(Above) Craig Norman (left, back), Dr. Helen Swarbrick, Eef van der Worp, Dr. Pauline Cho, and Dr. Hans Bleshoy, speakers on orthokeratology at the Bausch & Lomb Global Symposium on Vision Correction, Athens, Greece, April 2006.

(Above) Mike Bingham, Cardinal Contact Lens, Kitchener, ON (second from right), with Jonathan Jacobson, Andrew White, and David Bland at Wilmington, March 2006.

Events Calendar

August

5–6	Fundamentals of Corneal Reshaping (GOS)** Fullerton, CA, USA
31–5 Sept.	Nat'l Ophthalmologist Conference* Beijing, China (PRC)

September

12–13	International Optical Fair Beijing, China (PRC)
30–2 Oct.	VDC (Second European Vision Event)** Oberhausen, Germany

October

5–7	EFCLIN** Venice, Italy
5–8	Japan Clinical Ophthalmology Society Kyoto, Japan
6–8	ECLSO* Dubrovnik, Croatia
6–8	Orthokeratology Society of Oceania (OSO) Congress* Broadbeach, Australia
27–30	SILMO* Paris, France

* Indicates B&L attendance
** Indicates B&L exhibit

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