

# **BABO NEWS**

## ***For the Clinical Curriculum***

Newsletter of the

### **Baltimore Academy for Behavioral Optometry/OEP**

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#### **Change of Name**

With the merger of BABO and OEP as of January 1, 2003, the name of this newsletter will change with the next issue. Starting with the next issue, the new name will be ***Clinical Curriculum News***. We will continue with the features you have come to expect, such as the Consultation Corner, Questions and Answers, Book Reviews, Mind Candy, etc. If you have suggestions for items to be included, please let Theresa know. You can reach her by e mail [TheresaBABO.OEP@verizon.net](mailto:TheresaBABO.OEP@verizon.net) or at 1 800 447 0370.

#### **New Course Offering**

OEP/BABO has added a new course to its course offerings: **How to Examine Children from Birth Through Age Three**. This new course will be held for the first time August 23-24, 2003, in Baltimore, Maryland. The instructor for this new course will be Glen T. Steele, OD, FCOVD. This course proves to be important in light of the recent developments across the country in children's vision. Someone asked if, "A real, live, crying bundle of humanity would be examined during this course." The answer is, "Yes." Dr. Steele will examine several young children during the course, so you will have a real, live experience to augment the lecture. Those attending should bring their retinoscopes. If the children cooperate, you will have the opportunity to try your skills. If you are interested in this course, please let Theresa know as soon as possible. There are only a few spaces left.

#### **Questions and Answers**

*By: Paul Harris, O.D.*

The following question was submitted by Kyle Hoskins, O.D., South Bend, Indiana.

**Q.** I'm trying to progress beyond being a cook and becoming a chef, and I am in the process of reviewing several aspects of behavioral optometry. While reviewing Stress Point Retinoscopy, I encountered a few questions.

Does the Kraskin method give the optimal lens, while the Harris method gives the maximum plus? If so do you tend to RX slightly lower than the measured stress point or do you prescribe the maximum. (Assume unembedded individual)

Kraskin describes getting "against" motion on the onset of stress point retinoscopy while I usually see "with" motion. While I realize the motion is somewhat irrelevant (or is it?) with stress point, is this

difference due to technique or am I fundamentally flawed with my stress point assessment? What do the instructors usually see?

A. Let's look at your questions one at a time. You ask, "Does the Kraskin method give the optimal lens?" Kraskin postulated that this is so. If one follows the method as published in "Lens Power in Action" what you get is the lens that allows the person to use their visual process maximally efficiently for how they are now. This lens is not the lens that will provide the person the opportunity to move or shift to a new way of using their visual process. Rather it is the lens that allows them maximal productivity with the least effort and energy as currently constituted. In cases where a person is generally in good shape doing what they want to do in life and there are no *visual problems* (unmet needs that can be satisfied by providing the patient with the opportunity to change how they use vision to derive meaning and direct action) then following the Kraskin method will yield *the* lens that optimizes the visual process as is.

Kraskin often stated that he derived his near add almost exclusively from his stress point finding. One should keep in mind the nature of the late Dr. Kraskin's practice. For the most part his practice was a closed practice. Based on his philosophy of programmed preventive maintenance, once a patient came to him they remained a patient of his until either died. Since the number of hours in a year that can be devoted to providing care to patients is limited the number of patients that can be seen is limited. Once a schedule of preventive visits has been established there will become a maximum number of patients that can be serviced regularly. Dr. Kraskin established a range of 2500 to 3000 patients as the maximum that he would accept into his practice.

What this leads to is an understanding that when he wrote his, "Lens Power in Action," he had a closed mature practice. The majority of his patient examinations were people that had been seeing him for a long time. Most of his patients' major problems had already been treated with lenses and in some cases visual training. Thus, his ability to prescribe the stress point in most cases came directly from a single finding.

The nature of my practice was quite different from Dr. Kraskin's. As a secondary/tertiary care practitioner, I was mostly seeing people who were coming in with problems and wanted to change. In most cases, patients were not coming to the office for minor visual problems such as increasing time spent using their vision or using their vision more efficiently. Many were coming in with major visual development problems and/or other types of problems for which they were seeking a major overhaul.

Thus, as I was learning the stress point technique and simplifying it for my clinical needs, I found that I could use the test in another way. So the second part of your first question comes in now. "Does the Harris method give the maximum plus?" By looking for the point in space that brings the stress point closest to the person, thereby maximizing the volume of space in which they can maintain "fight", the Kraskin method found the lens that optimizes the system. My modification was to go beyond this amount, applying higher amounts of plus, which actually shifts the stress point further away in space from the patient than the optimum point. How much plus over the Kraskin optimum is too much?

You may recall that I made reference to a part from the work of Harmon where he states that if the interface between fight and flight is shifted out in space, away from the patient, any further than 10 cm or 4 inches closer to the person than their Harmon distance, then that lens will be rejected. My modification simply has us adding more and more plus until we find the exact amount that shifts the stress point (fight/flight interface) out to within 10 cm or 4 inches of the patient's Harmon distance. (See diagrams on stress point in Section 2 of the Art & Science of Optometric Care (BVC) Manual for an illustration.)

This then yields the maximum plus that could be prescribed *if and only if* you desire to use maximal plus to help provide the person the opportunity to make a change. It is NOT what I prescribe but is a finding. There are many cases where I will prescribe this maximum plus but not in all cases. Certainly in most cases of myopia control this is the lens I recommend often along with a reduced lens at distance and supplied in bifocal form.

Now you bring in embeddedness. In a way the embeddedness is already taken into account in the finding. What I mean about this is that a highly embedded patient will not have a wide range between the Kraskin optimum, my modification or the #14B (fused cross cylinder at near), while the less embedded patient will have a wider range between all of these lenses.

Generally, the embeddedness factors more into our thinking of prescribing at distance. The more highly embedded, the tighter the range of acceptable lenses that the patient will accept. The less embedded, the wider the range of acceptable lenses that can be prescribed for compensatory purposes. This applies though primarily to the compensatory lens.

In cases where the patient is having difficulties and you would like to give plus, my modification gives a guideline, which is fairly absolute. Do not give more plus at near than the stress point or the patient will reject the lens. This is so important in dealing with hyperopes and in particular the type of case labeled as an accommodative esotropia. So often we see patients coming in with the +3.00 adds on top of pushed plus at distance. Most have the glasses slid down and many look over the top for distance and use the top for near but almost never use the lower section. It was given by a well-intentioned eye care professional trying to do their best to straighten the eyes or to lessen the amount of “work” that the person needs to do to stay binocular. If you make sure you never give more than my modification of the stress point, then your prescriptions will get worn and you will have happy patients.

### Motion

Next you talk of motion in the reflex. Kraskin’s mention of this must have been a passing remark. During the procedure the scope is not moved but is planted and held steady. What we are looking for is a change in luminance and observations of motion are something one might note, but are not a formal part of the procedure. Rather than being an optical thing, where one is looking at possibly the dynamic shifts in a compound optical system, the core philosophy underlying the stress point retinoscopy procedure as put forth by Kraskin and Harmon was that what we were seeing was a total organismic response as they shifted from fight to flight. Is there possibly a small shift in the posture of accommodation at that moment? That possibility exists, but isn’t really what we are looking at.

The current thought on what is causing the shift in luminance is a change in the reflectance of the nerves of the retina in response to the change from fight to flight. It is known that individual nerves cells, even cells separated entirely from their supporting glial cells, change reflectance roughly proportionally to the frequency of action potentials firing off. Kraskin talked of watching spatial computing going from active to standby. While the mind is active spatially computing, the reflectance of the neural networks of the retina is high and one sees a bright reflex. As the person shifts from active looking to a passive protective mode of gazing out into space, the spatial computer shifts to standby and the overall number of action potentials in the retina drops dramatically, thereby decreasing reflectance, which we see with our handy little retinoscopes.

So please don’t worry that your technique is flawed. Keep on probing and asking these types of questions. And welcome to the world of cheldom! You’ve earned the right to wear the big hat and the checkered pants!

## Consultation Corner

*Edited By: Robert A. Hohendorf, O.D.*

*The following is a case presented by Robert Copeland, Wyomissing, PA. This is a change from our normal format of having the case presented by an instructor. We ask for your input and the instructors will respond as well. To be continued in future newsletters.*

This is an interesting case of a head trauma victim I recently encountered and I would like to share with and ask for input from other practitioners. Head trauma patients can be quite challenging and rewarding to work with. I have found many of these patients have seen other health care professionals first. Many times their visual symptoms may not appear until quite sometime after the incident. Frequently these patients are told their visual symptoms will resolve with time. Other times they may be ignored or denied their symptoms. Insurance issues also come into play with these patients.

I am Robert Copeland, OD. I graduated Illinois College of Optometry (ICO) in 1972 and have been a private practitioner for over 31 years. My background includes studying developmental optometry and Optometric Extension Program (OEP) case analysis with Leo Manas at ICO. In 1999 I decided to join COVD and work for my Fellowship. In order to complete the requirements, I took the BABO Clinical Curriculum Courses, Art & Science of Optometric Care – A Behavioral Perspective, VT/Visual Dysfunctions (VT1), VT/Learning Related Visual Problems (VT2), and VT/Strabismus & Amblyopia (VT3), all in one year. I have also attended several COVD courses and taken the Applied Concepts Courses at those meetings. Originally I wrote to Theresa asking for a case discussion concerning brain trauma, because I was working with three patients with symptoms resulting from head injuries. In return, she asked me to present one of my cases. I do so in the hope that everyone would gain some insight into the important role optometrist play in these cases. I also hope to gain some insight from those optometrists who have had experience treating such cases.

### Case Report - B.R.

1<sup>st</sup> examination Date: 12/23/01  
D.O.B. 9/21/51  
Age 50 years

### Case History:

BR came to my office with an extensive history of symptoms treated medically, psychiatricly and psychologically for post-traumatic brain injury suffered in 1994. The injury took place at work when she tripped and fell and hit her head. At the time, she did not remember being rendered unconscious. Her supervisors gave her a cold can of soda to hold against her head and she returned to work. Her major symptoms did not begin until much later. During her treatment time with me, BR would constantly want to go over her symptoms from beginning to end each and every visit.

BR entered the office with hat pulled down almost covering her eyes. She was wearing dark glasses and kept her head down. Her chief symptoms were of visual distortion, bothered by lights or changes of lighting around her. She noticed her left eye turned out. She could not look down.

BR worked as a laborer, putting wires on circuit boards. She reported that every time a person walked by her workstation, the lighting would change forcing her head down. She devised strategies, including the wearing of hats, putting heavy-duty black poster board around her workstation and finally actually

working on the floor under a table. Her employer found her behavior disrupting and threatened to fire her.

BR had seen four different eyecare practitioners in the three previous years. She had three slightly different prescriptions from each one of them. One practitioner, a neuro-ophthalmologist, refused to release any information on BR. Another ophthalmologist referred her to a psychiatrist.

Pertinent findings:

General health was unremarkable except for the traumatic head injury suffered years earlier.

Entrance visual correction:

OD +1.75-0.75x165 20/15 =+2.00 20/32

OS +1.25-0.25x007 20/20 = +2.00 20/32

OU Dist VA 20/15 20/20

Cover test: exophoria at far, alternating exotropia at near.

Convergence Near Point: Break 6 in. Recover 8 in.

Motilities: Full and grade 5 (Marcus System of rating, 5=Best Rating) in all positions of gaze.

BR verbalizes she feels “woozy” doing this.

Randot Stereopsis (BABO Special Version) 0 (can’t appreciate any symbols or float).

Pupil reflexes: PERRLA

Keratometry: OD +42.75 x44.00 /1.25 cylinder axis 170

OS +42.25x 43.50 / 1.25 cylinder axis 005

Auto refract: OD +1.75-0.50x166 20/20

OS +1.75-0.50x014 20/20

#7A: OD +1.50-0.75x 170 20/20

OS + 1.75-0.75x020 20/20 OU20/15

Control for distance findings 7A

#8 (Phoria at far)

Ortho

#9/10 (Base out, Blur/Break Recovery at far)

X/8/4 Reports feeling sick and pulls away from phoropter.

#11(Base in, Break/Recovery at far)

4/X Pulls away from phoropter and can not get a recovery finding.

Near phoria thru +2.00 over 7A

12 exophoria

#16 (Base Out, Blur/Break/Recovery)

X/16/0

#17 (Base In, Blur/Break/Recovery)

X/24/16 Reports feeling insides splitting apart. Lots of pulling back during fusional tests.

#20 (Minus to blur out)

-1.25

#21 (Plus to blur out)

+1.25

Visagraph findings were somewhat erratic.

I placed 2 Pd Base Down yoked prism before patient and had her walk around. She reported feeling more comfortable. 2 Pd Base Up was uncomfortable.

Diagnosis: Intermittent, Alternating Divergent Strabismus  
Convergence Insufficiency  
Ocular Motor Deficit (From Visagraph)

**Treatment Plan:**

1. New Rx OD +1.50-0.75x170 = 3 Pd Bd  
OS + 1.75-0.75x020= 3 Pd Bd  
+2.00 add OU in a Flattop 35  
Gold A/R coating
2. 24 sessions (3 months or 1 unit) in office VT
3. Reappointed for dilated fundus examination, 24-2 threshold visual field and IOP.

All ocular health findings and visual fields turned out normal. BR went on disability. BR started a program of Vision Therapy to normalize Binocular Function and stabilize ocular motility. BR would verbalize and write long reports on her symptoms during each treatment visit. At one visit, as I stood next to her, she would move to another position. I would move to the same side and again she would move. After doing this several times, I asked her what she felt. She said where I was standing affected the ambient light making her uncomfortable.

She wore my prescription for one month and said she could not tolerate the bifocal and that it made her feel sick. I remade the prescription, removed the yoked prism and at her request used a progressive bifocal. Two months later she reported difficulty with the prescription. I rechecked the subjective and prescribed a third set of lenses with:

OD +1.50-0.75x170  
OS +1.50-0.75x020 = +2.00 add OU Zeiss Gradal Top Progressive Bifocal with Gold A/R.

My treatment plan was to try and get BR some level of visual comfort with glasses, and use vision therapy to try and get equal matching visual input from each channel. I assumed a great deal of her visual discomfort was due to binocular instability.

There is much more information and interesting changes that occurred during BR's treatment program.

**Discussion of treatment Plan:**

My first goal was to try and prescribe spectacles that would give BR as much symptomatic relief as possible. I chose to follow Kaplan's technique of yoked prism to try and enhance visual input for BR while she was undergoing active in-office vision therapy. Therefore I tried prisms Base Up and Base Down to determine which would give symptomatic relief. In therapy I would have use yoked prism to disrupt visual behavioral and break down visual habits in order to restore new, more successful visual processing. Due to the severity of symptoms and the adverse effects vision was having on BR's quality of life, I felt she needed more immediate symptomatic relief. I chose to use a flattop 35 in order to achieve maximum near-point area for BR to view through without the distortion and small reading area of a progressive lens. I felt this important since her Visagraph findings indicated poor ocular motor control. The use of gold anti-reflecting was prescribed to try and cut glare and color distortion that was hampering BR in her work. **However, none of these prescribing strategies were successful; I am wondering why? I am looking for suggestions on what prescription might have been more appropriate. What additional testing might I have done?** Please send in comments and suggestions to [TheresaBBO.OEP@verizon.net](mailto:TheresaBBO.OEP@verizon.net).

This case represents a complex set of symptoms and some strange twists. In the next newsletter I hope to share some of those unusual results and more information and insights concerning BR's symptoms and how they affected her entire life.

## **Consultation Corner Follow Up from April Newsletter**

*By: Robert A. Hohendorf, O.D.*

Below are questions and answers on the AJT consultation from the April Newsletter. The AJT consultation started in June 2002 and continued until April 2003. Please refer to the BABO web site [www.babousa.org](http://www.babousa.org) for the original case and follow up evaluations.

- Q1 Bob, I always check visual acuity monocularly and binocularly through the #4, #7, #7a. I do not see individual acuities.
- A1 I always do also with a new patient. I do on-an-as-needed basis with VT progress checks. When I see AJT again, post VT, I will retake all the acuities, like a new patient.
- Q2 The #7 is max + or least minus to 20/20 after binocular balance. The #7A is maximum plus to BVA. The aniso should remain the same for these two findings. In the last data for AJT the aniso for the #7 is 0.25 D, and for the #7A it is 0.75 D.
- A2 Thanks! It was a typo. The OS -0.25 D should have been -0.75 D.  
So #7 should be: OD plano OS -0.75 D  
and #7A stays the same: OD-0.25 D OS-1.00 D
- Q3 The higher aniso is confirmed by the 14B finding (OD +1.50 D, OS+1.00 D), or at least 0.50 D of it is.
- A3 See A2. The aniso changed 0.25 D because I also do monocular cross cylinders and in this case the aniso changed 0.25 D less than the far refractive balance.
- Q4 You can lead a horse to water, but you cannot make it drink. This case demonstrates the frustration I would feel for what is clearly the need for an in office based treatment program. However the compromise is acceptable if the patient is compliant.
- A4 The only reason I still offer vision therapy programs other than the clinical curriculum grids is some people just can't make the effort and monetary sacrifice necessary to complete a 6-9 month program. It does make it much more difficult to get the full results a full VT program can offer, but it sometimes does get the full results! It also gets some results and some help where no benefits would have been created.

## **AJT Update**

AJT returned for a progress visit on 7/23/2003. Some modified procedures were worked on from the progress check before and the "Vision Builder" CD was added. The first part of the DEM was still low. Mom, a teacher, was ecstatic! He is reading and spelling well above his grade level. His handwriting has improved to satisfactory. Mom has referred three more students like AJ. Sometimes even if

compliance and execution of the plan is not perfect, we can help more than we sometimes realize by not being too rigid in what we demand. The only other problem I see is if there is a lack of results; which is true for any VT format, but the odds increase if we try approaches that are less than comprehensive. So, if patients are less than cooperative or opt for less than your most comprehensive program, monitor them closely.

## **Special Offer**

OEP has a special offer for any BABO attendee who is not a clinical associate of OEP. There is even a special offer for those of you who are already clinical associates. *Watch your mail box* for this special information coming from OEP. If you would like to enroll as an OEP Clinical Associate, please contact Kathleen at 1 800 424 8070.

## **OD Needed**

Dr. Lynde Kimball, of Brattleboro, Vermont, is looking for an OD to join his practice to provide full scope optometry and vision therapy. Call Dr. Kimball directly, 802 254 6900.

## **Success Story**

*Marc Bergeron, O.D.*

Marc shared a story with us concerning the success of Vision Therapy on his daughter. Marc has taken two of the Clinical Curriculum Courses, The Art & Science of Optometric Care – A Behavioral Perspective Course and the VT/Visual Dysfunctions Course.

Six weeks ago, we (my wife, Angie, and I) took Amanda, our daughter, to an "ADD specialist", for testing. The MD ran a McLean Motion Analysis Test (MMAT), an infrared head/eye-tracking test that is linked by internet to an analysis center in Massachusetts so the results return in minutes. The MD has been using this test as one of his main barometers of hyperactivity and ADD for two years. He has done over a thousand of them. The results: Amanda would definitely benefit from Ritalin "in a low dose," since she scored low in most of the categories and showed some characteristic results of ADD. We were scheduled to come back for a final prescribing consult.

In the mean time, I started vision therapy with Amanda. Instead of returning for the prescribing consult, Angie and I decided to have Amanda re-tested, since Amanda had been doing VT for six weeks now. I knew Amanda was progressing through vision therapy, and wanted to see if it would make any changes in her test results.

On the re-test, Amanda scored above average in most of the categories and does not show any indication that Ritalin should be prescribed. (See chart on following page for before and after VT test results.) The MD was amazed. Angie told him Amanda had been doing vision therapy since she had the original testing. The MD said he was aware of VT but nobody in the medical field respects it and he did not expect Amanda's second test to be any better than her first. I asked him if he had ever seen such a difference in test scores. He said, "Not without medication." I asked him if she could have done better because she was more experienced with the test. He said, "No." The only change that could have affected Amanda's test scores was the vision therapy. I share this because we don't always have this kind of feedback to validate our work with vision therapy. Angie and I are thrilled.

### McLean Motion Analysis Test (MMAT)

Measurements	Results before VT	Normal Range	Description	Results after VT
Immobility Duration	<b>0.093L</b>	0.140-0.396	The average amount of time spent sitting still	<b>0.493H</b>
Movements	<b>2854H</b>	351-2034	The average number of position changes	<b>592</b>
Displacement	<b>10.91H</b>	0.43-2.79	The total distance moved by the marker (like an odometer reading)	<b>1.42</b>
Area	<b>119H</b>	5-52	The total area covered by the marker	<b>11</b>
Spatial Complexity	<b>1.228</b>	1.209-1.489	The complexity of the movement path. Lower values indicate that the marker is often moving linearly, back-and-forth. Higher values indicate that the movement of the marker is more complex and convoluted.	<b>1.608H</b>
Temporal Scaling	<b>0.924H</b>	0.165-0.797	The extent to which the child is active (0= Lack of movement to 1= incessant movement)	<b>0.181</b>
Accuracy	<b>87.1L</b>	87.8-99.0	The percentage of correct responses	<b>92.7</b>
Omission Errors	<b>1.6</b>	0.0-4.3	The percentage of missed targets (a degree of inattention)	<b>1.7</b>
Commission Errors	<b>25.73H</b>	0.78-20.90	The percentage of incorrect responses to a non-target (measures impulsivity)	<b>13.97</b>
Latency	<b>456</b>	369-717	The average amount of time to respond correctly (speed)	<b>444</b>
Variability	<b>96</b>	75-171	Measures variation in response time to the correct target (S.D.)	<b>109</b>
C.O.V.	<b>21</b>	14-33	A more stringent measure of response inconsistency	<b>25</b>

The MMAT is a continuous performance test. The patient wears a headband with a reflective ball on the back and an infrared camera behind the patient takes photo at 50 frames per second. The task is to hit the space bar when an 8-point star shows up on the screen. An equal number of 8 and 5-point stars are randomly displayed on the screen.

## Treasures From the Vault

By: Paul A. Harris, O.D.

From the April 1997 BABO Newsletter comes this treasure:

In an article from the November 1996 *Scientific American* entitled, “Dyslexia - A new model of this reading disorder emphasizes defects in the language-processing rather than the visual system,” explains why some very smart people have trouble learning to read. It is interesting that the author, Sally Shaywitz, is at the Yale Center for the Study of Learning and Attention, the same campus from which the Gesell Institute was spawned.

In the article under a section called *The Myths of Dyslexia* Shaywitz states: “Myth: Eye training is a treatment for dyslexia. More than two decades of research have shown that dyslexia reflects a linguistic deficit. There is no evidence that eye training alleviates the disorder.”

In the body of the article, Shaywitz states, “Early explanations of dyslexia, put forth in the 1920’s, held that defects in the visual system were to blame for the reversals of letter and words thought to typify dyslexic reading. Eye training was often prescribed to overcome these alleged visual defects. Subsequent research has shown, however, that children with dyslexia are not unusually prone to reversing letters or words and that the cognitive deficit responsible for the disorder is related to the language system.”

**It is precisely this attitude that we must understand when we talk to people about Dyslexia and ADD. As stated in The VT/Learning Related Visual Problems Course, this is why so many view that which we do as unscientific, they have been indoctrinated into believing that the problems are secondary to hardware problems. Of course, what we do is quackery because you can’t change broken brains! This is why we should continually emphasize: We work with learning related visual problems. We don’t treat dyslexia or ADD. Also, we don’t work to change eyeballs, we work to provide the patient with the opportunity to have the necessary meaningful experience to allow them to alter their visual abilities.**

See page 11 for The Clinical Curriculum Course Schedule. Or check the web site, [www.babousa.org](http://www.babousa.org) for a complete worldwide schedule.

## **Clinical Curriculum Course Schedule 2003**

2003 August 23-24	How to Examine Children from Birth Through Age Three, Baltimore, Maryland
2003 September 10-13	VT/Strabismus & Amblyopia (VT3), Baltimore, Maryland
2003 September 18-22	The Art & Science of Optometric Care, A Behavioral Perspective (BVC), Grand Rapids, Michigan
2003 November 13-17	VT/Visual Dysfunctions (VT1), Grand Rapids, Michigan
2003 December 5-8	VT/Learning Related Visual Problems (VT2), Baltimore, MD

## **Clinical Curriculum Course Schedule 2004**

2004 February 7-8	Essentials of Behavioral Vision Care, Phoenix, Arizona
2004 February 25-28	The Art & Science of Optometric Care –A Behavioral Perspective Phoenix, Arizona
2004 March 25-28	VT/Strabismus & Amblyopia, Grand Rapids, Michigan
2004 April 21-25	VT/Visual Dysfunctions Phoenix, Arizona
2004 May 13-17	The Art & Science of Optometric Care –A Behavioral Perspective Baltimore, Maryland
2004 June 3-6	VT/Learning Related Visual Problems, Grand Rapids, Michigan
2004 July 15-19	VT/Visual Dysfunctions, Grand Rapids, Michigan
2004 Aug 7-8	Essentials of Behavioral Vision Care, Baltimore, Maryland
2004 September 9-13	The Art & Science of Optometric Care –A Behavioral Perspective Grand Rapids, Michigan
2004 November 4-7	VT/Learning Related Visual Problems, Phoenix, Arizona
2004 December 2-6	VT/Visual Dysfunctions, Baltimore, Maryland