

### STATE BOARD OF OPTOMETRY

2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834 P (916) 575-7170 F (916) 575-7292 www.optometry .ca.gov



### Continuing Education Course Approval Checklist

Title:		
Provider Name:		
<ul><li>☑Completed Application</li><li>Open to all Optometrists?</li><li>☑Yes</li><li>☐No</li><li>Maintain Record Agreement?</li><li>☑Yes</li><li>☐No</li></ul>		
☑Correct Application Fee		
☑ Detailed Course Summary		
☑ Detailed Course Outline		
☑ PowerPoint and/or other Presentation Materials		
☑Advertising (optional)		
☑CV for EACH Course Instructor		
<ul><li>☑ License Verification for Each Course Instructor</li><li>Disciplinary History? □ Yes ☑ No</li></ul>		



2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834 P (916) 575-7170 F (916) 575-7292 www.optometry.ca.gov





CONTINUING EDUCA	ION COURSE APPROVAL	1990 OMY
\$50 Mandatory APPL	-ICATION Cashier	ing and Board Use Only
Pursuant to California Codo of Poquilations (CCD) 8 4500	Receipt # Pay	yor ID Beneficiary ID Amoun
Pursuant to California Code of Regulations (CCR) § 1536, receiving the applicable fee, the requested information bel	the Board Will approve continuing educ ow and it has been defermined that the	course meets criteria
specified in CCR § 1536(g).	1.1765 177	
In addition to the information requested below, please atta- subject matter. Applications must be submitted 45 days pr	ch a copy of the course schedule and to rior to the course presentation date.	9309// <i>166062/ YV</i> 5- ppical/outline of the
Please type or print clearly.	<i>p</i>	
Course Title STAR WARS! GO ROBUE	Course Presentation Date	
	7:45 AM - 11:3	35 AM
Symtony and Symtony Torie: The Best of both Galaxies	12/18/26	— — — — — — — — — — — — — — — — — — —
	Contact Information	
Cousal vision because e	· v	
<u> Gipa</u> <u>Vala</u>	<u>demar</u> F.	
Provider Mailing Address	(Last) (M	liddle)
		•
Street 393 S. Main St. City Ovange	State <u>CA</u> Zip <u>9288</u>	<u>8</u> 0
Provider Email Address 9 Na Valdemar @ Co	astal-vision o com	
Will the proposed course be open to all California licen	sed optometrists?	YES □ NO
Do you agree to maintain and furnish to the Board and/ of course content and attendance as the Board requires from the date of course presentation?	or attending licensee such records s, for a period of at least three years	YES □ NO
Course Instru	ictor Information	
Please provide the information below and attach the curricular there are more instructors in the course, please provide the instructor Name	lum vitae for each instructor or lecturer le requested information on a separate	involved in the course. sheet of paper.
	b .	٠.
<u>150</u> <u>6a</u>	r but	>. ·
(First)	_ast)	(Middle)
License Number 99999	License Type	
Phone Number (714) 746-9679	Email Address	
I declare under penalty of perjury under the laws of the	□ State of California that all the inform:	ation submitted on
this form and on any accompanying attachments submi	itted is true and correct.	
Signature of Course Provider		
• ······· · · · · · · · · · · · · · · ·	Date	,



# IN A TIME OF CELEBRATION, A GROUP OF UNLIKELY HEROES BAND TOGETHER ON A MISSION TO LEARN MORE ABOUT OPTOMETRY, THEIR CHOSEN WEAPON.



### WHEN:

Sunday, December 18<sup>th</sup>
Registration opens at 6:45am
7:45am-11:35am (4-hour CE followed by the movie)

#### WHERE:

AMC Downtown Disney Downtown Disney District 1565 Disneyland Drive Anaheim, CA 92802

#### Hyperdrive of Toys

Bring any new, unwrapped toy, to benefit Toys for Tots; and receive a movie ticket for you and a guest for Rogue One: A Star Wars Story.

Movie to follow CE. Additional tickets available for purchase.



**Downtown Disney Parking:** First 2 hours are free; additional 2 hours free with AMC validation (Disneyland parking lots may be available for all day parking prices; parking is responsibility of attendee)

For registration information please visit our Affiliate Portal: coastalvisionmedical.com/site/ces.htm

#### MCFMIN

6:45 am	Check-in (pastries and	coffee provided)	
7:45 am	Welcome - Opening Remarks		
7:50 am	Lisa Garbutt, MD	Symfony and Symfony Toric: The Best of Both Galaxies	
8:15 am	Jennifer Wu, MD	Corneal Crosslinking "The Lightsaber for Corneal Ectasia"	
8:40 am	Raj Rathod, MD	Retina One: A Story of Systemic Discovery	
9:05 am	Dan Tran, MD	Combining Laser Corneal Refractive Surgery and Intraocular Lens Technology - The Force is Strong	
9:30 am	Break	all and a final an	
9:55 am	Vincent Hau, MD	Retina JeopardyFrom a Galaxy, Far, Far Away	
10:20 am	Betsy Nguyen, MD	MIGS Episode III: Cypass Micro-Stent, A New Hope	
:10:45 am	Madhu Agarwal, MD	Eye Rebel: Waging War on Orbital Disease	
11:10 am	Dan Tran, MD Lisa Garbutt, MD Betsy Nguyen, MD Jennifer Wu, MD	Rogue Diagnosis: Case Presentations	
<b>11:</b> 35 am	Conclusion		
11:45 am	Movie: Rogue One: A S	Star Wars Story	

<sup>\*</sup>CE and movie ticket registration is based on first-come, first-served basis. Seating is limited.



November 5, 2016

State Board of Optometry 2450 Del Paso Road, Ste. 105 Sacramento, CA 95834

RE: Late submission of CE course approval; Star Wars: Go Rogue Symposium-Symfony and Symfony Toric; The Best of Both Galaxies, Corneal Crosslinking "The Lightsaber for Corneal Ectasia", Retina One: A Story of Systemic Discovery, Combining Laser Refractive Surgery and Intraocular Lens Technology-The force is strong, Retina Jeopardy, MIGS Episode III: Cypass Micro-Stent, A New Hope, Eye Rebel: Waging War on Orbital Disease, Rogue Diagnosis: Case Presentations.

Dear Practice and Education committee,

I am writing this letter in regards to late submission for the multi-course symposium titled "Star Wars; Go Rogue" scheduled for presentation on 12/18/16. We are just shy of the 45 day submission request, and wanted to include a letter for late submission with our CE approval application.

We continue to work diligently to get all required items to the board needed for CE approval in a timely manner. Due to multiple speakers at the upcoming CE, we had difficulty obtaining all the lectures to meet the submission requirement timeline and would appreciation your consideration of our continuing education approval request.

Please feel free to reach out to us with any other questions. We look forward to continued relations with the State Board of Optometry and the practice and education committee.

Sincerely,

Gina Valdemar

Affiliate/Relations and Education Director

Coastal Vision Medical Group

gipavaldemar@coastal-vision.com

**Star Wars: Go Rogue 4 hour CE** 

**Course Title: Symfony and Symfony Toric** 

Course Presentation date: 12/18/2016

Speaker: Lisa D. Garbutt, MD

Target Audience: This lecture is intended for optometrist seeking continuing

education

### **Course Description:**

This lecture seeks to provide optometrists with information regarding the newest IOL selections. Discussion includes exploring and understanding the newest alternative to multifocal lenses on the market. It will clarify the optical properties which help them work and learn about the results patients should experience with this technology. With the growing population in need of IOL surgery, this prepares the Optometrist with ample information to assist with education for their patient's care.

CE Credit: .50 CE Unit

1	Symfony and Symfony Toric: The Best of Both Galaxies Lisa D. Garbutt, M.D.
	Coastal Vision Medical Group
2	Symfony and Symfony Toric
	•
	•
	•
	<ul> <li>The first Extended Depth of Focus (EDOF) Presbyopia -Correcting IOL for patients with and without Astigmatism</li> </ul>
3	Proprietary Technology
	•
	•
	Echelette Design - Extends the depth of focus
	<ul> <li>Echelette Design - Extends the depth of focus</li> <li>Achromatic Technology - Corrects chromatic aberration for enhanced image contrast</li> </ul>
4	Extended Depth of Focus
	•
	•
	The echelette design introduces a pattern of light diffraction that elongates the focus of the eye
	<ul> <li>The height, spacing, and profile of the echelettes are optimized to create a diffractive pattern for an elongated focus</li> </ul>
5	Elongated focus
	•
	•
	•
•	•
	Glare and halo comparable to a monofocal
6	Correction of Chromatic Aberration
- (	•
•	•
	•
	<ul> <li>Achromatic technology is optimized to counteract the chromatic aberraton of the cornea, improving contrast sensitivity</li> </ul>
7	Achromatic Technology Results in Improved Contrast Sensitivity
8	Continuous Vision
•	•

- 20/20 or better from distance to 1.5D of defocus
- 20/40 or better from distance to 2.5D of defocus

#### 9 Continuous Vision

- Delivers sustained mean visual acuity of 20/25 or better through 1.5D of defocus
- Increase of 1.0D of range of vision throughout the defocus curve compared to a monofocal

### 10 Symfony Toric

- Symfony Toric also delivers the same continuous range of vision as the Symfony IOL
- Cylinder powers at Corneal Plane: 0.69, 1.03, 1.54, 2.06, 2.57, 3.08,3.60, 4.11

### 11 Great Vision At All Distances

Monofocal Distance vision with Symfony improved 2.4 lines for intermediate vision and 2.2 lines for near vision compared to the monofocal control

#### 12 Wision at all distances

•

13 Wision at all distances

- At 3 months, almost all Symfony patients experienced high spectacle independence at far, intermediate and near distances
- Symfony subjects reported no significant difference in glare or halo occurence compared to a monofocal IOL

#### 14 Patient Satisfaction

 97% of the 31 subjects implanted with the Symfony IOL would elect to have the lens implanted again

#### 15 EDOF

- EDOF is an emerging class of IOL
- Hallmark of this type of IOL is that it gives cataract patients a somewhat expanded

depth of field without the drawbacks associated with a multifocal visual system

• Maximizes the patient's range of vision by tackling chromatic aberration

#### 16 EDOF

• This type of lens aims to bridge the gap between multifocals and monofocals and allow more vision at different distances while minimizing visual side effects

#### 17 EDOF

- The EDOF lens will perform better at near than the monofocal, but not as well at near as the multifocal
- · Halos and glare will be comparable to the monofocal

### 18 EDOF

- With optics you can't gain an expanded range of vision without losing something in terms of the sharpness of vision
- However, by correcting chromatic aberration, even without using diffractive optics to expand the visual range, the lens would have extremely sharp distance vision on the order of 20/10 to 20/12
- Since the lens correcting chromatic aberration starts off so sharp, the vision will then only degrade to 20/20 after adding the diffractive optics to expand the range of vision

### 19 Symfony FDA trial basics

- 20/20 or better at distance over a range of about 1.50D
- 20/40 or better over a range of 2.5D
- 96% of patients had 20/25 or better vision at intermediate
- 92% of patients had 20/40 or better vision at near
- · Comparable to a monofocal from a night vision and contrast sensitivity perspective

#### 20 Lenses in the Pipeline

- Calhoun Vision Light-Adjustable Lens
- PowerVision FluidVision Lens
- · Akkolens Lumina
- · Vision Solutions Liquilens

### 21 Calhoun Light Adjustable Lens

- Power is adjustable by the surgeon, with input from the patient, after the lens is in place
- Adjustment is made by irradiating the lens's special silicone material with UV light, which changes its shape and thus its power
- UV light is then used to "lock" the shape change when the refraction is optimal

#### 22 PowerVision FluidVision Lens

- An acrylic IOL with anterior and posterior optics with a central cavity between them
- Compressable haptics contain a silicone-oil-based fluid
- The two large haptics are connected to the central fluid cavity

#### 23 PowerVision FluidVision Lens

- When the eye's normal physiological accommodation occurs and the zonules release tension on the capsule, it compresses the two large haptics
- This pushes the silicone oil fluid between the two optics and creates an

accommodative effect

· This large lens requires a 4mm incision

#### 24 Akkolens Lumina

- Similar to the FluidVision Lens, the Lumina is a dual-optic lens that relies on the action of the ciliary body for its effect
- Placed in the sulcus
- Once in the sulcus, action of the ciliary body causes one of the optics to slide over the other optic, creating a continuous change in the total lens power

### 25 Akkolens Lumina

- In initial pilot study, distance vision is similar to the monofocal, with 2-3 diopters of accommodation
- Details needing follow up are expectations it may cause some degree of pigment dispersion or may increase IOP by interacting with the ciliary body
- · Since lens is in the sulcus, possibly higher incidence of PCO

### 26 Vision Solutions Liquilens

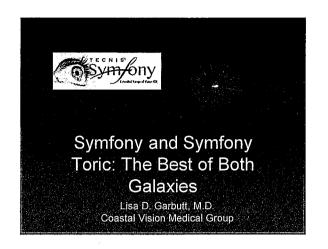
- · Also taking the liquid route to accommodation is the Liquilens
- · Instead of using the body's anatomical forces, however, the lens uses gravity
- It uses "the fluidics of two immiscible optically clear biocompatible fluids and their interplay to introduce an additional index of refraction into the line of sight that provides additional power when the patient looks down at a 60 to 70 degree angle"
- When the patient looks forward, the fluid is out of the way and the lens provides distance vision
- This lens is more like a bofocal, however, with not much intermediate vision

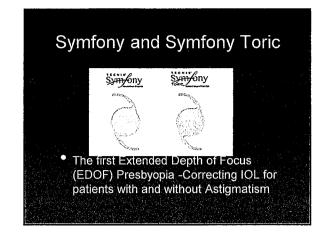
### 27 References

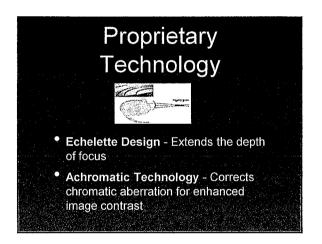
- Bethke, Walter. IOL Alternatives to Multifocality. Review of Ophthalmology. 8
  January 2015
- Tecnis Symfony and Tecnis Symfony Toric IOLs. Abbott Medical Optics Presentation 2016.

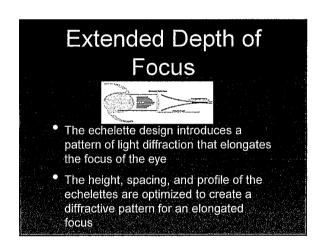
#### 28 Questions?

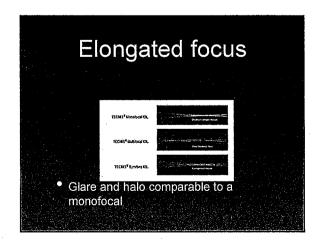
Thank you!

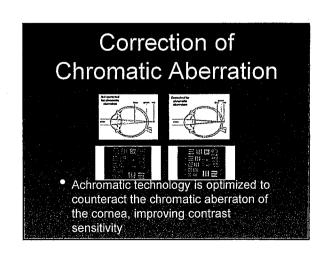


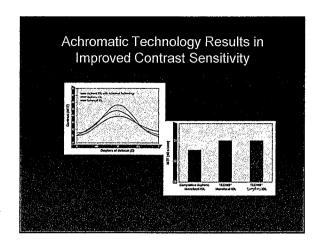


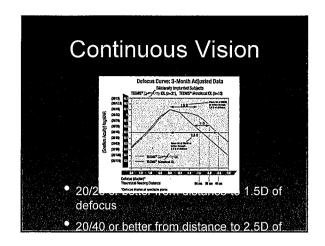










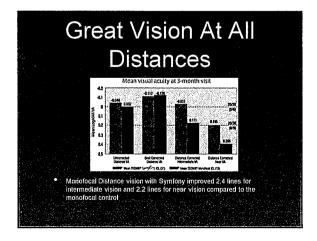


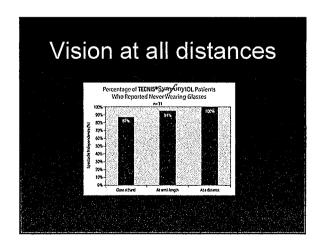
### **Continuous Vision**

- Delivers sustained mean visual acuity of 20/25 or better through 1.5D of defocus
- Increase of 1.0D of range of vision throughout the defocus curve compared to a monofocal

### Symfony Toric

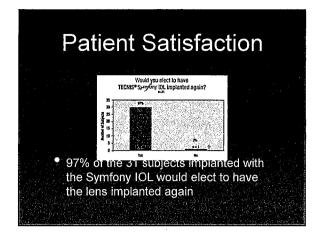
- Symfony Toric also delivers the same continuous range of vision as the Symfony IOL
- Cylinder powers at Corneal Plane: 0.69, 1.03, 1.54, 2.06, 2.57, 3.08,3.60, 4.11





### Vision at all distances

- At 3 months, almost all Symfony patients experienced high spectacle independence at far, intermediate and near distances
- Symfony subjects reported no significant difference in glare or halo occurence compared to a monofocal IOL



### **EDOF**

- EDOF is an emerging class of IOL
- Hallmark of this type of IOL is that it gives cataract patients a somewhat expanded depth of field without the drawbacks associated with a multifocal visual system
- Maximizes the patient's range of vision by tackling chromatic aberration

### **EDOF**

 This type of lens aims to bridge the gap between multifocals and monofocals and allow more vision at different distances while minimizing visual side effects

### **EDOF**

- The EDOF lens will perform better at near than the monofocal, but not as well at near as the multifocal
- Halos and glare will be comparable to the monofocal

### **EDOF**

- With optics you can't gain an expanded range of vision without losing something in terms of the sharpness of vision
- However, by correcting chromatic aberration, even without using diffractive optics to expand the visual range, the lens would have extremely sharp distance vision on the order of 20/10 to 20/12
- Since the lens correcting chromatic aberration starts off so sharp, the vision will then only degrade to 20/20 after adding the diffractive optics to expand the range of vision

### Symfony FDA trial

- 20/20 or bet alsi es over a range of about 1.50D
- 20/40 or better over a range of 2.5D
- 96% of patients had 20/25 or better vision at intermediate
- 92% of patients had 20/40 or better vision at near
- Comparable to a monofocal from a night vision and contrast sensitivity perspective

### Lenses in the **Pipeline**

- Calhoun Vision Light-Adjustable Lens
- PowerVision FluidVision Lens
- Akkolens Lumina
- Vision Solutions Liquilens

## Calhoun Light

- Adjustable Lens
  Power is adjustable by the surgeon,
  with input from the patient, after the lens is in place
- Adjustment is made by irradiating the lens's special silicone material with UV light, which changes its shape and thus its power
- UV light is then used to "lock" the shape change when the refraction is optimal

### **PowerVision** FluidVision Lens

- An acrylic IOL with anterior and posterior optics with a central cavity between them
- Compressable haptics contain a silicone-oil-based fluid
- The two large haptics are connected to the central fluid cavity

### **PowerVision** FluidVision Lens

- When the eye's normal physiological accommodation occurs and the zonules release tension on the capsule, it compresses the two large haptics
- This pushes the silicone oil fluid between the two optics and creates an accommodative effect
- This large lens requires a 4mm incision

### Akkolens Lumina

- Similar to the FluidVision Lens, the Lumina is a dual-optic lens that relies on the action of the ciliary body for its effect
- Placed in the sulcus
- Once in the sulcus, action of the ciliary body causes one of the optics to slide over the other optic, creating a continuous change in the total lens power

### Akkolens Lumina

- In initial pilot study, distance vision is similar to the monofocal, with 2-3 diopters of accommodation
- Details needing follow up are expectations it may cause some degree of pigment dispersion or may increase IOP by interacting with the ciliary body
- Since lens is in the sulcus, possibly higher incidence of PCO



- Also taking the liquid route to accommodation is the Liquilens
- Instead of using the body's anatomical forces, however, the lens uses gravity
- It uses "the fluidics of two immiscible optically clear biocompatible fluids and their interplay to introduce an additional index of retraction into the line of sight that provides additional power when the patient looks down at a 60 to 70 degree angle"
- When the patient looks forward, the fluid is out of the way and the lens provides distance vision
- This lens is more like a bofocal, however, with not much intermediate

### References

- Bethke, Walter. IOL Alternatives to Multifocality. Review of Ophthalmology. 8 January 2015
- Tecnis Symfony and Tecnis Symfony Toric IOLs. Abbott Medical Optics Presentation 2016.

### Questions?

Thank you!

### Lisa D. Garbutt, MD

### lisagarbutt@coastal-vision.com

### **Experience**

COASTAL VISION MEDICAL GROUP, ORANGE, NEWPORT BEACH, AND LONG BEACH, CA MARCH 2014 TO PRESENT BOARD CERTIFIED OPHTHALMOLOGIST/CORNEAL SUBSPECIALIST General ophthalmology, specializing in the treatment of cataracts, ocular surface disease, corneal disease and surgery, and eyelid surgery.

INLAND EYE SPECIALISTS, MURRIETA AND FALLBROOK, CA AUGUST 2008 TO MARCH 2014 BOARD CERTIFIED OPHTHALMOLOGIST/CORNEAL SUBSPECIALIST General ophthalmology, specializing in the treatment of ocular surface disease, cataract surgery, DSAEK, and LASIK.

UCSD DEPARTMENT OF OPHTHALMOLOGY/SHILEY EYE CENTER JULY 2007 TO JULY 2008 CORNEA FELLOW, CLINICAL INSTRUCTOR Fellowship in Cornea, Cataract and Refractive Surgery, Clinical Instructor for Residency Program

#### Education

BOSTON UNIVERSITY SCHOOL OF MEDICINE. Doctor of Medicine (Cum Laude), May 2003. Boston, Massachusetts

BOSTON UNIVERSITY SCHOOL OF MEDICINE. Master of Arts, Medical Science, January 1999. Boston, Massachusetts

UNIVERSITY OF CALIFORNIA, LOS ANGELES. Bachelor of Science, Psychobiology, December 1994. Los Angeles, California

### **Postgraduate Training**

UNIVERSITY OF CALIFORNIA, SAN DIEGO. Shiley Eye Center. Fellowship in Cornea, Cataract and Refractive Surgery. Fellowship Director: David J. Schanzlin, M.D.

UNIVERSITY OF CALIFORNIA, SAN DIEGO. Shiley Eye Center. Ophthalmology Residency, 2004-2007.

UNIVERSITY OF CALIFORNIA, SAN DIEGO. Department of General Surgery. General Surgery Internship, 2003-2004.

### **Honors and Awards**

Cum Laude. Doctor of Medicine. Boston University School of Medicine. May 2003

Medical School Honors/Advanced Standing: Gross Anatomy, Histology, Neurosciences, Biochemistry, Endocrinology, Immunology, Physiology, Microbiology, Pathology, Pharmacology, Psychiatry, Obstetrics & Gynecology, Medicine, Gastrointestinal Surgery, Ophthalmology, Plastic & Reconstructive Surgery, Ophthalmic Pathology

Dean's List - Boston University School of Medicine. Fall 2000

Association of Pathology Chairs Honor Society. Boston University School of Medicine. 2000

UCSD Department of Ophthalmology Director's Award. June 2007

Physician of the Quarter. Fallbrook Hospital. First Quarter of 2011. Fallbrook, California.

### Memberships

American Academy of Ophthalmology

American Society of Cataract and Refractive Surgery

### Licensure

Medical Board of California. 4/15/2005, License No. A90909

### **Board Certification**

American Board of Ophthalmology. October 2008.

#### Other Certification

MORIA Microkeratome Certification Training Course. August 2006.

VISX Physician Certification Training Course, Advanced CostumVue Training, Monovision Training. August 2007, 2012.

Intralase Global Training Course. October 2007. Re-certification 2012.

#### Research

Sub-Investigator. Alcon. Completion of Principal Investigator and Sub-Investigator Training Course. Alcon. Fort Worth, Texas. July 2011.

Sub-Investigator. Alcon. C-09-045: A Phase 3 Multicenter, Randomized, Controlled, Double-Masked Study of Safety and Efficacy of Sodium Hyluronate Ophthalmic Solution, 0.18% in Dry Eye Syndrome. Semptember 2011-June 2013.

Sub-Investigator. Icon Bioscience, Inc. Investigational Product IBI-10090 (dexamethasone intraocular injection). A Multicenter, Randomized, Double-masked, Doseranging, Phase 2 Study to Evaluate the

Efficacy and Safety of IBI-10090 for the Treatement of Inflammation Associated with Ocular Surgery. September 2012 - December 2012.

Garbutt LD. Purcell T. Nalgirkar A. Schanzlin DS. Corneal Applications of a New Collagen Gel Cross-Linked In Situ. Presented at UCSD Shiley Eye Center Research Alumni Day. May 2007.

Garbutt LD. Nabavi C. Korn BK. Kikkawa DO. Eyelid Levels Following Orbital Decompression. Presented at UCSD Shiley Eye Center Research Alumni Day. May 20, 2006.

Garbutt LD. Korn BK. Kikkawa DO. Periorbital Basal Cell Carcinoma: MOHS Micrographic Surgery vs. Surgical Excision with Frozen-Section Control. Presented at UCSD Shiley Eye Center Research Alumni Day. June 4, 2005.

Black PH. Garbutt LD. Stress, Inflammation, and Cardiovascular Disease. Journal of Psychosomatic Research. 52(Jan. 2002) 1-23.

Contributed to article: Black, PH. Stress and the Inflammatory Response: a Review of Neurogenic Inflammation. Brain, Behavior, and Immunity. 16(6) 2002 Dec. 622-653.

Master's Thesis 1998. Boston University School of Medicine. Stress, the Inflammatory Response, and the Initiation and Progression of Atherosclerosis. Accepted December 1998.

### Leadership

Ophthalmology Staff Physician Representative. Ambulatory Surgery Center Medical Advisory Committee. Inland Eye Specialists. June 2010 - 2014.

Chairman. Systems Review Committee. Fallbrook Hospital. January 2011-January 2013.

Physician Member. Systems Review Committee. Fallbrook Hospital. January 2009January 2011.

Physician Member. Medical Staff Executive Committee. Fallbrook Hospital. January 2011-January 2013.

UCSD Department of Ophthalmology Resident Physician Committee Representative. Graduate Medical Education, 2004-2006.

Resident Physician Council. UCSD Medical Center. 2005-2006.

American Medical Student Association Member. 1999-2003.

### **Other Employment**

Scrub Technician. Michael J. Groth, M.D., Ophthalmic Plastic and Reconstructive Surgery. Beverly Hills, California. October 1994-August 1997.

Scrub Technician. Robert W. Hutcherson, M.D., Head and Neck Plastic & Reconstructive Surgery. Beverly Hills, California. October 1994-August 1997.

Office Manager/Surgery Scheduling. Michael J. Groth, M.D., Ophthalmic Plastic and Reconstructive Surgery. Beverly Hills, California. October 1993-October 1994.

### References

Douglas Clements, M.D. Inland Eye Specialists. Fallbrook, CA. 760-728-5728.

Leah Levi, M.D. Previous Residency Director. UCSD Department of Ophthalmology, Shiley Eye Center. La Jolla, California 858-534-629