26th Annual NORA Multi-Disciplinary Conference

Adam’s Mark Hotel
120 Church St, Buffalo, NY 14202

September 14th - 17th, 2017

Board Meeting: Wednesday, September 13, 2017
Clinical Skills Program: Thursday - Friday, September 14th – 15th, 2017
General Conference: Saturday - Sunday, September 16th – 17th, 2017

Celebrate With Us at the Saturday Night Awards Dinner
Welcome to the Twenty-Six Annual NORA Multi-Disciplinary Conference

The Neuro-Optometric Rehabilitation Association, International (NORA) is an optometric organization working with other disciplines to advance the art and science of visual rehabilitation for the neurologically challenged patient. Neuro-Optometric Rehabilitation is an individualized treatment regimen for patients with visual deficits as a result of physical disabilities, traumatic brain injuries, stroke, and other neurological problems. It specifically treats acquired visual dysfunctions as determined by standardized diagnostic criteria and should be a part of the multi-disciplinary rehabilitation team. The treatment regimens encompass medically necessary compensatory and non-compensatory lenses and prisms with or without occlusion and other appropriate strategies.

This conference will demonstrate the importance of Neuro-Optometric rehabilitation and its role in effectively collaborating with the rehabilitation team in improving patient outcomes.

Committee members for this year’s conference are:

**Conference Chair:** Jenny Garbus, CBIS

**Exhibits Chair:** Alma Privette, COVT

**Clinical Skills Chairs:** DeAnn Fitzgerald, OD
Vince Vicci, OD, FNORA

**Education Chairs:** DeAnn Fitzgerald, OD
Tracy Ammann, OD

**Student Relations Chair:** Derek, Tong, OD, FNORA

**Student Grants Chair:** Carl Garbus, OD FAAO

**Student Poster and Paper Session Chair:** Melissa Zarn Urkakar, OD

**NORA Fellowship Chair:** Marsha Benshir, OD, FNORA

**Continuing Education OT's Awards Chair:** Charles Shidlofsky, OD, FCOVD

**Student Relations Chair:** Carl Garbus, OD FAAO

**Student Grants Chair:** Marsha Benshir, OD, FNORA

**Continuing Education OT's Awards Chair:** Charles Shidlofsky, OD, FCOVD

**Student Poster and Paper Session Chair:** Melissa Zarn Urkakar, OD

**NORA Board (2017-19)**

**President**
Susan Daniel, OD

**Vice President**
DeAnn Fitzgerald, OD

**Secretary/Treasurer**
Charles Shidlofsky, OD, FCOVD

**Council Members**
Tracy Ammann, OD
Shannon McGuire, BHSc(PT)
Deborah Ellsworth, OTR/L

**Immediate Past President**
Curtis Baxstrom, OD, FCOVD, FNORA

**Executive Director**
Willard Bleything, OD

The contact person for NORA conference questions or registration
Jenny Garbus, CBIS
Phone: 616 609-7324 Fax: 616-775-9627

e-mail: info@nora.cc

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We look forward to seeing you in Saint Louis in 2018

**SCHEDULE AT-A-GLANCE**

**Wednesday, September 14, 2017**

9:00 a.m. to 6:00 p.m.  NORA Board meeting
3:00 p.m. to 6:00 p.m.  Registration (Pre Conference Clinical Skills only please)

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**CLINICAL SKILLS PROGRAM SCHEDULE (PRE-CONFERENCE PROGRAM)**

The Clinical Skills Program is an opportunity to further your knowledge and expertise through study and examination. If you are new to Neuro-Optometric Rehabilitation and desire practical clinical applications, you should attend this program. The program provides 12 hours of continuing education for Levels I & II and the Advanced NOR course. The courses run concurrently and cannot be taken simultaneously. These courses include both hands-on and lecture style presentations.

***If you have taken Level I or II previously, the course content is continuously being updated, so consider refreshing your knowledge and register for a course again at the special discounted rate - see the registration form for pricing.***

- **Skills Level I** – This program is designed as an introduction to basic application and principles of anatomy and physiology to rehabilitative care. There will also be a specific focus on the basic principles of Neuro-Optometric Rehabilitative care used in the process of rehabilitation.

- **Skills Level II** – This program will provide advanced applications of general rehabilitation and Neuro-Optometric Rehabilitation.

- **Advanced NOR Course** – This year our Advanced NOR Course will include a panel of doctors who will discuss and highlight cases, treatment, and outcomes for patients with neurological and processing disorders.

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**Thursday, September 22, 2017**

8:00 a.m. to 8:30 a.m.  Welcome & Current Update to the Clinical Skills Program  
DeAnn Fitzgerald, O.D. - NORA Curriculum Chair

8:30 a.m. to 4:30 p.m.  Clinical Skills Program (12 Hours COPE Approved)  
**Skills Level I**  
Coordinator: DeAnn Fitzgerald, OD  
Presenters:  
DeAnn Fitzgerald, OD; Shannon McGuire, HSc(PT); Becky Moran, OTR/L and Sue Wenberg, DC

**Skills Level II**  
Coordinator: Vince Vicci, OD, FNORA  
Presenters:  
Janet Berthiaume, OTR/L, FNORA; Raquel Munitz Goldfeder, MS, COVT, Tracy Ammann, OD, William Padula, OD, FNORA and Vince Vicci, OD, FNORA

8:30 a.m. to 4:30 p.m.  Advanced NOR Course  
Cases, Treatment and Outcomes for Patients with Neurological and Processing Disorders  
Panel Doctors:  
Marsha Benshir, OD, FNORA  
Camilla Dukes, O.D. FC0VD  
Randy Schulman, OD, FC0VD  
Charles Shidlofsky, OD, FC0VD
Thursday Evening – September 15, 2017

7:00 p.m. to 9:30 p.m.  Fellowship Program Level I, II, and III Presentations

This program has been designed for those individuals who are working toward completing Level’s I & II presentations. This program offers no continuing education credit, all are welcome to participate in the presentations.

- **Level I**  Clinical Skills Presentations  (12 minutes each)
- **Level II**  Case Report Presentations  (20 minutes each)
- **Level III**  Publication Presentations  (30 minutes each)

Friday, September 23, 2016

8:00 a.m. to 4:30 p.m.  Clinical Skills Levels I and II and Advanced NOR Course – continued

3:00 p.m. to 7:30 pm.  Registration General Conference

** Exhibit Hall Opens Friday morning 9:00 am – 5:00 pm **

Followed by Friday’s night kick off

6:00 pm – 7:00 pm  Exhibitor’s Wine and Cheese Reception and Student Poster Session

7:15 pm – 8:45 pm  *Assessment of Oculomotor Behavior After Brain Injury Using Eye Tracking*  
Dr. Melissa Hunfalvay - Co-Founder & Chief Science Officer  
*Ph.D., AASP-CC, APA, AOA, USPTA1*

Barbara Barclay,  
President at RightEye, LLC

7:15 pm – 8:45 pm  Friday Night Student Program

*Changing Lives, Yours and Your Patients*  
Marsha Benshir, OD, FNORA

*How to Start Working in Neuro-Optometric Rehabilitation*  
Carl Garbus, OD

*NORA President’s Message*  
Susan Daniel, OD
NORA General Conference Schedule
September 16 - 17, 2017 - General Conference includes 14 hours COPE Pending Hours.

Saturday, September 16, 2017

7:00 am – 5:00 pm Exhibits and Posters

7:00 am to 7:50 am Exhibitor Seminars and Breakfast

7:55 am to 8:05 am 
Welcome and Opening Remarks
Susan Daniel, O.D. NORA President

8:05 am to 8:55 am
From Nano neurosurgery and Neurophotonics to predictive modeling: Artificial Intelligence and Virtual Reality paradigm shift in brain mapping and therapeutics

Babak Kateb, M.D. - Chairman/CEO: Society for Brain Mapping & Therapeutics, President, Brain Mapping Foundation

8:55 am to 9:45 am
Utilizing Brain Mapping with Neuro-Optometric Rehabilitation

Deborah Zelinsky, O.D. - Mind-Eye Connection

9:45 am to 10:05 am - Mid-morning break (Exhibit halls open)

10:05 am to 11:45 am
Utilizing Brain Mapping with Neuro-Optometric Rehabilitation

Deborah Zelinsky, O.D. - Mind-Eye Connection

10:55 am to 11:45 am
Therapeutics of Neuro-Visual System Integration

Jeramiah Jorgenson, PT

11:45 am to 1:00 pm - Exhibitors Luncheon

1:00 pm to 1:50 pm
Neuroprocessing Disorders: Dementia & Alzheimer’s
Kinga Szigeti, MD, PhD, Neurologist and Director: Alzheimer’s Disease and Memory Disorders Center

Neuroprocessing Disorders: Multiple Sclerosis

Bianca Weinstock-Gutman, MD, Neurologist and Director, Multiple Sclerosis Center

1:50 pm to 2:40 pm

Neuro-Optometric Rehabilitation of Neuroprocessing Disorders

Cheryl Letheren, OD - Staff Rehabilitation Optometrist, Parkwood Hospital

2:40 pm to 3:00 pm - Mid-afternoon Break (Exhibit hall open)

3:00 pm to 3:50 pm

Mild Traumatic Brain Injury & Sleep in the post-combat environment: characteristics, treatments, & outcomes

Bret W. Logan, MD, Psychiatrist and Marc M. Zola PhD, Neuropsychologist - TBI Center, Blanchfield Army Community Hosp

3:50 pm to 4:50 pm - Oral Papers Presentations

4:50 pm to 5:20 pm - General Membership Meeting

6:30 pm to 7:00 pm - Cocktail Reception

7:00 pm to 11:00 pm - NORA Awards Dinner
Sunday, September 17, 2017

7:00 am – 2:00 pm Exhibits and Posters

7:00 am to 7:50 am Exhibitor Seminars and Breakfast

8:00 a.m. to 8:50 a.m.
Concussions in Young Athletes: Is Soccer the Elephant in the Room?
Hirsch Handmacker, MD, Professor of Radiology

8:55 am to 9:45 am
Clinical and Objective Vision-Based Biomarkers for Mild Traumatic Brain Injury (mMBI)/Concussion
Kenneth Ciuffreda, OD, PhD

9:45 am to 10:05 am Mid-morning break (Exhibit hall open)

10:05 am to 11:45 am
Use of fMRI to Quantify Neurophysiological Changes after Vision Therapy Intervention
Tara L. Alvarez, PhD: Department of Biomedical Engineering

11:45 am to 1:00 pm Exhibit Hall Box Lunch

1:00 pm to 2:40 pm
Optometric Neurorehabilitation of Concussion/TBI
Amy Chang, OD: Traumatic Brain Injury Outpatient Program

2:40 pm
Closing Remarks
Susan Daniel, O.D. NORA President

SEE YOU NEXT YEAR
September 20–23, 2018

Hyatt Regency Saint Louis @ the Arch
315 Chestnut Street, Saint Louis, MO 63102
Tara L. Alvarez, PhD, Professor of Biomedical Engineering, New Jersey Institute of Technology has published, extensively, in neuroscience journals as well as optometric journals. Dr. Alvarez is conducting neuroscience research that could help stroke victims recover their vision and lead to the diagnosis of other visual conditions. Dr. Alvarez seeks to understand how the brain learns when visually locating objects in three-dimensional (3D) space. Understanding the learning strategies that the human brain uses to control eye movement, also yields insight into the general problem of motor learning. She is the recipient of the 2008 NORA Founding Fathers Award. Dr. Alvarez has utilized fMRI studies to measure neurophysiological changes after vergence training in patients with convergence insufficiency – a condition often present in the TBI population.

Amy Chang, OD Staff Optometrist, Traumatic Brain Injury Outpatient Program, Hennepin County Medical Center, Minneapolis has authored several papers and books on traumatic brain injury and has extensive experience in Neuro-Optometry. This includes a residency on Acquired Brain Injury Vision Rehabilitation, State College of Optometry, SUNY, and then the development of a Vision Rehabilitation Clinic, Womack Army Medical Center, Ft. Bragg, North Carolina.

Kenneth Ciufreda, OD, PhD is a Distinguished Teaching Professor of Vision Science, State College of Optometry, SUNY sharing the role of vision-based biomarkers in the treatment of mild Traumatic Brain Injury and Concussion. A familiar figure in the optometric community Dr. Ciufreda has authored 38 book chapters, 180 scientific papers and made over 200 presentations at various professional meetings.

Hirsch Handmacker, MD is Professor of Radiology, College of Medicine, University of Arizona. He is known for his work on concussion having authored over 70 publications and two textbooks in this area.

Jeremiah Jorgensen, MPT will center on therapeutics of Neuro-Visual system integration. Jeremiah opened the Center for Spine and Sport Rehab February 2007. Jeremiah has 14 yrs experience working in outpatient orthopedics. He is a consultant for the Neuropathy DR program as a clinical specialist and adjunct instructor.

Babak Kateb, MD, President of the Brain Mapping Foundation, and Research Scientist, Dept. of Neurosurgery, Cedars-Sinai Medical Ctr. Dr. Kateb is a neuroscientist with years of experience focusing on peripheral neurosurgery, stroke, epilepsy and fetal cell transplants. Dr. Kateb will describe new advances in brain mapping technology and the clinical implications.

Kinga Szigeti, MD, PhD Director the Alzheimer’s Disease and Memory Disorders Center and Translational Genomics Research Laboratory She is a neurologist with specialty training in genetics and cognitive disorders. The research laboratory is a state-of-the-art facility specializing in cognitive disorders.

Cheryl Letheren, OD, Staff Rehabilitation Optometrist, Parkwood Hospital. She will discuss Neuro-Optometric rehabilitation of Neuro-processing disorders. Dr. Letheren helped form the first multidisciplinary team to assess and treat brain injury patients in a rehab hospital setting in Canada. She is a popular speaker for physical therapists and occupational therapists offering regular seminars and workshops.

Brent W. Logan, MD (Psychiatrist) and Marc M. Zola, PhD (Neuropsychologist) a team from the National Intrepid Center of Excellence, Walter Reed National Military Medical, NICOE Intrepid Spirit, Fort Campbell, Tennessee will present a discussion on Mild Traumatic Brain Injury and Sleep in the post-combat environment: Characteristics, Treatments, and Outcomes. Brent W. Logan, MD and Marc M. Zola, PhD have published in the area of concussive brain injury and are strong advocates of interdisciplinary models of care. While older care techniques still serve a purpose, modern technologies such as quantitative EEG biofeedback and computer-based cognitive training tools are now center to treatment plans.
Bianca Weinstock-Guttman MD  Director of the Jacob’s Multiple Sclerosis Center for Treatment and Research at UBMD Neurology. The center is devoted to the comprehensive care of adults and children living with multiple sclerosis (MS) and other demyelinating disorders. They provide diagnostic and therapeutic interventions for MS patients and for patients with other autoimmune diseases affecting the central nervous system.

Deborah Zelinsky, OD  FNORA  Director of the Mind-Eye Connection has been active in developing research in retinal circuitry including retinal stimulation. Dr. Zelinsky has made presentations in the US, Canada, and Europe to internists, neurologists, and rehabilitation professionals.

### GENERAL INFORMATION

#### Registration
The full registration fee allows admission to all General Conference education sessions, exhibits, NORA Exhibitor Luncheon, and Annual Awards Banquet (except the fee at the survivors/student level). Additional Exhibitors luncheon tickets can be purchased separately for guests at $40 per person, and Awards Dinner tickets at $50 per person. A non-transferable name badge is required for entry to all events. Registration is for the entire General Conference and cannot be broken down to individual courses or days. Refunds for registration, less a $50 administrative fee, can only be requested in writing and postmarked no later than September 1, 2017. **Absolutely no refunds will be made after September 1, 2017, no exceptions.**

**Student/Resident Grants** are also available by contacting Carl Garbus, OD @ cgarbusod@gmail.com before July 15, 2017. **Paper and Poster** submittals should be placed with Melissa Zarn, OD, before August 1, 2017 at mzarn@sco.edu.

In an effort to provide full accessibility to the NORA conference we ask that you please indicate any special needs arrangement or accommodations that you might have on your registration. Special needs requests must be received by September 1, 2017.

#### Continuing Education
Continuing education credits are being secured for a variety of professional disciplines including OD and OTR/L. Optometric continuing education credits have been applied for with COPE. It is your responsibility to confirm acceptance of credit with your individual State Board. If you have any questions regarding Optometric continuing education credit, contact NORA. NORA is an approved provider of continuing education for Occupational Therapy through AOTA. For questions regarding Occupational Therapy continuing education, contact Deborah Ellsworth OTR/L by e-mail d.ellsworth@wyoming.com. **Check our website for updated information about COPE approval and CEs for other professions.**

#### Hotel Registration
This year’s conference will be held at the Adam’s Mark Hotel, Buffalo, NY. We have set aside a limited block of rooms available at a special rate of $119.00 (1 king /2 double) **To ensure the best available accommodations at the best rate, you must book your room by August 13, 2017. All reservations are based on availability.** Since we require a minimum room utilization to secure the best arrangements for the conference, please be sure to ask for the special NORA conference room rate please log on to [https://reservations.travelclick.com/15259?groupId=1627769&hotelID=15259#/guestsandrooms](https://reservations.travelclick.com/15259?groupId=1627769&hotelID=15259#/guestsandrooms). Our conference rate is also available at least 3 days before and 3 days after the conference. Call the hotel directly, to get the NORA conference rate, but feel free to look up the hotel on the web for general information. You can book rooms in the NORA block at: **1-716-845-5100.**

#### Transportation from the Airport
Adam’s Mark Hotel: 15 minutes from **Buffalo-Niagara International Airport**
2035 Niagara Falls Blvd, Niagara Falls, NY 14304

NORA has made special arrangements with Hotel with a special shuttle – “Free” to all our attendees please call number below for pick up.

**Hotel:** Adams Mark Buffalo
120 Church Street, Buffalo, NY, 14202,
Clinical Skills Program
Visit our website at www.nora.cc for more information about the Pre-Conference and Clinical Skills Building Programs. If you have additional questions, please contact DeAnn Fitzgerald, OD at drfitznora@gmail.com

Audio CD Recording
Audio recording of presentations for individual use is allowed. Please do not take video or pictures during any presentations due to privacy of concerns. General Conference Presentations will be available on from DigiVision www.digivisionmedia.com and available for purchase at the conference. Clinical Skills I, II and the Advanced NOR course are not being recorded. Fees will be listed on the order form presented at the conference.

Exhibit Hall
The Exhibit Hall hours are Friday (September 15th) from 9:00 am to 5:00 pm, Saturday (September 16th) 7:00 am – 5:00 pm and Sunday (September 17th) from 7:00 am to 2:00 pm. Be sure to visit the exhibitors and thank them for their support. Exhibits are coordinated by Alma Privette so please contact her with any questions - aprivette@bcvision.org

For any additional questions or information: Website: www.nora.cc Email: info@nora.cc Phone: 949-250-0176
**2017 Annual NORA Conference Registration Form**

To register and pay via credit card, go to the registration weblink at [www.nora.cc](http://www.nora.cc). To pay by check, complete the registration form below and mail it to the address listed with your check (made payable to NORA). Please submit one form per attendee.

**Join NORA before September 1, 2016 to take advantage of the general conference membership rate.**

Mail your registration form and check to: NORA, 28514 Constellation Road, Valencia, CA 91355

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**26TH Annual NORA Conference – September 14 – 17, 2017**

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<tr>
<th>Conference Fees</th>
<th>Received by Aug 31, 2017</th>
<th>Postmarked after Aug 31, 2017</th>
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<td>Doctorate Level Providers (OD, MD, DC, PhD, etc.)-Includes education sessions, exhibits, banquet &amp; luncheon</td>
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<tr>
<td>NORA Member</td>
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<td>$555</td>
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<tr>
<td>Non-Member</td>
<td>$705</td>
<td>$755</td>
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<tr>
<td>Other Health Providers OT, PT, Speech or Vision Therapists, Staff, and Educators-Includes education sessions, exhibits, banquet &amp; luncheon</td>
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<tr>
<td>TBI Survivors, Residents and Students-Includes education sessions, exhibits, banquet &amp; luncheon</td>
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<td>General Conference</td>
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(Student/Resident grants are available. Contact Carl Garbus, OD @ 661 433-3696 or carbusod@gmail.com)

**Advanced NOR Course**

$350

**Clinical Skills Development** (To enroll in the Fellowship Program contact NORA for additional cost & details)

Initial (first-time attendee) $300

Refresher $225

(Must provide proof of prior attendance)

Print: Name ___________________________ Degree/Occupation ___________________________

Mailing Address ____________________________________________________________

Hospital or Outpatient Affiliation _____________________________________________

City/State ___________________________ Zip ___________________________

Student: List School Name: ___________________________ Graduation Year ___________

Phone (______) ____________ Fax (______) ____________ E-mail ___________________________

Any special nutritional/dietary needs ___________________________

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I **will/will not (circle one)** be attending the Awards Dinner Gala on Saturday, September 16, 2017

(This is for planning purposes only. There will be no credit given if you choose not to attend.)

| Clinical Skills Courses | $__________ | Clinical Skills Level (please circle) I II Adv NOR |
| General Conference | $__________ | Find your appropriate General Conference Fee |
| | $__________ | #_____ Additional Exhibitor Luncheon tickets ($40 per person) |
| | $__________ | #_____ Additional Dinner Awards Tickets ($50 per person) |

**Total Enclosed (checks only) $__________** Please retain a copy for your records