ISNR
INTERNATIONAL SOCIETY FOR NEUROFEEDBACK & RESEARCH

24th Annual Conference

Sept 19-25, 2016: PreConference and Conference: Orlando Florida

Schedules and Workshop Descriptions

Please note: All schedules are subject to change without notice.



Table of Contents:

Pre-Conference Workshops Schedule

September 19-21, 2016, Hyatt Regency Grand Cypress, Orlando, FL

Monday, September 19, 2016 – Pre-Conference Workshops

Time	
7:00 AM-5:00 PM	*Registration in Grand Cypress Foyer*
7:30 AM-8:30 AM	*Continental Breakfast in Regency Hallway*
8:00 AM-5:30 PM	***Pre-Conference 8-Hour Workshops** – (Includes Two 15-minute breaks & hour break for lunch on own; See Separate Workshop Schedule -- Additional Fees Apply)*

Tuesday, September 20, 2016 – Pre-Conference Workshops

Time	
7:00 AM-5:00 PM	*Registration in Grand Cypress Foyer*
7:30 AM-8:30 AM	*Continental Breakfast in Regency Hallway*
8:00 AM-5:30 PM	***Pre-Conference 8-Hour Workshops** – (Includes Two 15-minute breaks & hour break for lunch on own; See Separate Workshop Schedule -- Additional Fees Apply)*

Wednesday, September 21, 2016 – Pre-Conference Workshops

Time	
7:00 AM-5:00 PM	*Registration in Grand Cypress Foyer*
7:30 AM-8:30 AM	*Continental Breakfast in Regency Hallway*
8:00 AM-5:30 PM	***Pre-Conference 8-Hour Workshops** – (Includes Two 15-minute breaks & hour break for lunch on own; See Separate Workshop Schedule -- Additional Fees Apply)*
9:00 AM-5:00 PM	***ISNR Golf Tournament** (Grand Cypress Golf Course, Scramble format). Online Pre-registration required. A portion of proceeds go to the ISNR Student Advocacy Fund. Prizes awarded at banquet dinner. *The golf event coordinator will arrange tee times after registration.*
9:00 AM-5:00 PM	*Exhibitor Set-Up in*
6:00 PM-7:30 PM	***ISNR Board of Directors Meeting in Atrium 1412***
7:30 PM-9:30 PM	***Opening Welcome Reception in the Exhibit Area (GC Foyer and ABC)***

Conference Schedule

September 22-25, 2016, Hyatt Regency Grand Cypress, Orlando, FL

Thursday, September 22, 2016 – Annual Conference Schedule

Time		
7:00 AM-5:00 PM	*Registration in Grand Cypress Foyer*	
7:00 AM-8:30 AM	*Continental Breakfast in GC Portico and GC ABC*	
7:45 AM-8:00 AM	***Plenary Session Room 1 Grand Cypress DEF (this column)*** ***Presidential Address: Kirk Little, PsyD***	***Plenary Session Room 2 Grand Cypress GHI (this column)***
8:00 AM-9:00 AM	*Riding the Wave to Recovery: sLORETA QEEG in Sport-Related Concussion* **Level:** Intermediate ***David Ims***	***ISNR FOUNDATIONS*** *Be CALM & Pay ATTENTION! An overview of assessment findings and intervention strategies for Attention-Deficit/Hyperactivity Disorder (ADHD)* **Level:** Basic ***Lynda Thompson, PhD & Michael Thompson, MD***
9:00 AM-5:00 PM	***Exhibit Hall Open in GC ABC***	
9:00 AM-9:10 AM	*Break*	
9:10 AM-10:10 AM	*Words that Don't Work: Frontal Gamma Asymmetry Examination of Precognitive Responses* **Level:** Basic ***Ronald Bonnstetter, PhD & Nancy Wigton, PhD***	***ISNR FOUNDATIONS*** *Getting to Know LORETA: Evaluating and training surface and internal brain structures* **Level:** Basic ***Joel Lubar, PhD***
10:10 AM-10:20 AM	*Break*	
10:20 AM-10:50 AM	*Comparing Bivariate and Multivariate Coherence Neurofeedback for Autism Spectrum Disorder* **Level:** Intermediate ***Robert Coben, PhD & Morgan Middlebrooks***	***ISNR FOUNDATIONS*** *Neurofeedback for Optimal Performance and Sport* **Level:** Basic ***Leslie Sherlin, PhD***
10:50 AM-11:00 AM	*Break*	

Time								
11:00 AM-11:50 PM	***Invited Speaker:*** **Samantha Winter, MS, Doctoral Candidate** Adjunct Professor of Cognitive Psychology and Statistics at Drexel University **Eating and the Brain: Using EEG to Understand Eating Behavior and Weight Gain Proneness** **Level:** Advanced							
11:50 AM-12:00 PM	*Break*							
12:00 PM-1:00 PM	***Keynote Speaker:*** **Karen Waldie, PhD** Associate Professor in the School of Psychology at the University of Auckland **Genes, Brains, and Neuroplasticity in Developmental Dyslexia** **Level:** Intermediate							
1:00 PM-2:00 PM	*Lunch on your own* **(Lake House Resturant - Healthy Express Buffet for Attendees - $15.95 pp)**							
1:00 PM-2:00 PM	***Brown Bag Discussion*** *(For Students Only):* ***Student Advocacy Committee Meeting – Charles Wasserman, Doctoral Candidate in Gardenia***							
1:00 PM-1:30 PM	***Members Meeting in GC DEF***							
2:00 PM-5:00 PM	***Break****- Explore the Exhibit Hall for the latest in technology, services and trends in Neurofeedback*							
2:00 PM-3:00 PM	***Small Group Discussions***							
	ISNR FOUNDATIONS *Discussion On The Various Types Of Equipment Available For NFB* *Facilitator:* ***Mike Cohen*** ***in Regency Hall 7***	***ISNR FOUNDATIONS*** *Getting Started: Paperwork, Forms, Tracking Progress, Protocol Selection, Etc.* *Facilitator:* ***Joy Lunt*** ***In Regency Hall 5***	***ISNR FOUNDATIONS*** *BCIA Certification, Re-Cert, & Mentoring Overview Of BCN, BCB* *Facilitator:* ***Judy Crawford*** ***in Regency Hall 6***	*Stens Corporation Sponsored* *Wish Lists, Technical Questions and the Best of the New BioTrace+ Software from Mind Media and Stens Corporation* *Facilitator:* ***John Anderson*** ***in Regency Hall 1***	*Bio-Medical Instruments Sponsored* *Review of Products and Services* *Facilitator:* ***Brian Millsted*** ***in Regency Hall 4***	*Integrated Neuroscience Services Sponsored* *Coherence Assessment and Training* *Facilitator:* ***Robert Coben*** ***in Regency Hall 3***	*Intro to Slow Cortical Potentials (SCP) NFB* *Facilitator:* ***Sarah Wyckoff*** ***in Regency Hall 8***	*A Brief Review Of The Autonomic Nervous System - Sympathetic And Parasympathetic Functions* *Facilitator:* ***Victoria Wasserman*** ***in Regency Hall 9***
2:00 PM-6:30 PM	***ISNRU Conference Workshop - 4 hours*** *(See Workshop Schedule for Details; Additional Fees Apply)*							
3:15 PM-6:30 PM	***Conference Workshops*** *- (See Workshop Schedule for Details; Additional Fees Apply)*							

Time	
6:30 PM-9:00 PM	***Poster Session and Reception in the Exhibit Area (GC Foyer and ABC)***
9:00 PM-11:00 PM	***President's Party*** **By Invitation Only*

Friday, September 23, 2016 – Annual Conference Schedule

Time		
7:00 AM-5:00 PM	*Registration in Grand Cypress Foyer*	
7:00 AM-8:30 AM	*Continental Breakfast*	
9:00 AM-5:00 PM	***Exhibit Hall Open***	
8:00 AM-9:00 AM	***Plenary Session Room 1 in GC DEF (this column)*** *Relative Efficacy of two different forms of Coherence Neurofeedback for Seizure Disorders* **Level:** Intermediate ***Morgan Middlebrooks; Robert Coben, PhD; Janease Traylor, MS***	***Plenary Session Room 2 in GC GHI (this column)*** *Finding the Beat: Simultaneously-recorded Cortical and Subcortical Steady-State Responses to Missing Pulse Rhythms* **Level:** Intermediate ***Charles Wasserman, Doctoral Candidate*** *The Prevalence of Epileptiform Discharges in a Psychiatric Practice: A Study of Non-epileptic Children, Adolescents, and Young Adults with Autism* **Level:** Intermediate ***Ronald Swatzyna, PhD & Alexandra Roark***
9:00 AM-9:10 AM	*Break*	
9:10 AM-10:10 AM	*Science and Clinical Application of Instantaneous Z-Score Neurofeedback* **Level:** Intermediate ***Thomas Collura, PhD & Robert Thatcher, PhD***	*Integrating Neurofeedback and Photobiomodulation in the treatment of Neuropsychiatric disorders and Neurodegenerative disease* **Level:** Intermediate ***Lew Lim, DNM, PhD, MBA & Marvin Berman, PhD***
10:10 AM-10:20 AM	*Break*	
10:20 AM-10:50 AM	*Neurofeedback as Symptom Management in Chronic Chemotherapy-Induced Peripheral Neuropathy (CIPN)* **Level:** Intermediate ***Sarah Prinsloo, PhD & Randall Lyle, PhD***	*Why Supplementation of the Functional Forms of Vitamin B12 May be Helpful to Brain Health, Particularly for the Elderly, Under Conditions of Oxidative Stress and Inflammation* **Level:** Basic ***Robert Boddington, MS***

Time	
10:50 AM-11:00 AM	*Break*
11:00 AM-11:50 AM	***Invited Speaker:*** **Kenneth Blum, PhD** Retired professor of Pharmacology, University of Texas; Adjunct Professor of Psychiatric Genetics in Department of Psychiatry, Keck School of Medicine, University of Southern California; Chief Scientific Officer of LaVitaRDS and President of Igene, LLC **Reward Deficiency Solution System: Neurogenetic and Neuroimaging Translational Neural Regulation Having Clinical Relevance** **Level:** Advanced
11:50 AM-12:00 PM	*Break*
12:00 PM-1:00 PM	***Keynote Speaker:*** **Jeanne Paz, PhD** Assistant Professor of Neurology; Faculty member, Neuroscience and Biomedical Science graduate programs at the University of California San Francisco **Closed-loop control of Corticothalamic Circuits to Prevent Seizures with Light** **Level:** Intermediate
1:00 PM-2:00 PM	*Lunch on your own*
1:00 PM-2:00 PM	***Brown Bag Discussion*** *(For Students Only):* ***Conversation with the ISNR President, Kirk Little, PsyD***
1:00 PM-3:00 PM	***FNNR*** *(formerly the ISNR Research Foundation)* ***Board Meeting***
1:30 PM-5:00 PM	***Break****- Explore the Exhibit Hall for the latest in technology, services and trends in Neurofeedback*
2:00 PM-3:00 PM	***Small Group Discussions***

Time								
	BrainMaster Technologies Sponsored *Clinical Update on Combined QEEG, Live Brain Imaging, and Region-of-Interest Techniques including Live Z-Scores and Micropower pEMF* *Facilitators:* ***Bill Mrklas & Thomas Collura*** ***in Regency Hall 7***	*Applied Neuroscience Incorporated Sponsored* *How to Link the Patient's Symptoms to the Patient's Brain* *Facilitator:* ***Robert Thatcher*** ***In Regency Hall 5***	*Tracking LORETA NFB Progress Over Sessions With Clinical Correlation For Patients With Complex Addiction Disorders* *Facilitator:* ***Joel Lubar*** ***In Regency Hall 6***	*Performance Training With Athletes* *Facilitator:* ***Leslie Sherlin*** ***In Poinciana A-D***	*Infraslow Neuro-feedback For Autism, PTSD, And Addictions* *Facilitator:* ***Mark Smith*** ***in Regency Hall 4***	*Combination of LORETA NFB and NeuroField Electromagnetic Stimulation in Therapy of Epilepsy* *Facilitator:* ***J. Lucas Koberda*** ***In Regency Hall 3***	*Basics Of NFB Research - Design, Collection, And Publishing* *Facilitator:* ***Charles Wasserman*** ***In Regency Hall 8***	*Stimulation Techniques For Neuromodulation* *Facilitator:* ***Mary Dellinger*** ***In Regency Hall 9***
2:00 PM-6:30 PM	***ISNRU Conference Workshop - 4 hours*** *(See Workshop Schedule for Details; Additional Fees Apply)*							
3:15 PM-6:30 PM	***Conference Workshops*** *- (See Workshop Schedule for Details; Additional Fees Apply)*							
3:15 PM-6:15 PM	***QEEG Didactic Board Certification Exam in Gardenia*** *For preapproved applicants only*							
8:30 PM-10:30 PM	***BrainMaster Reception*** *– All attendees are invited in La Coquina*							

Saturday, September 24, 2016 — Annual Conference Schedule

Time		
7:00 AM-5:00 PM	*Registration in Grand Cypress Foyer*	
7:00 AM-8:30 AM	*Continental Breakfast in GC Portico and ABC*	
9:00 AM-5:00 PM	***Exhibit Hall Open in GC ABC***	
8:00 AM-9:00 AM	***Plenary Session Room 1 in GC DEF (this column)*** *What the Sham is Going on? Redefining Attention Deficit/ Hyperactivity Disorder (ADHD) and the Inherent Problems with Neurofeedback Sham (Placebo – controlled) Protocols in an Operant Conditioning Model* **Level:** Intermediate ***Rex Cannon, PhD***	***Plenary Session Room 2 in GC GHI (this column)*** *Domestic Violence and Brain Injury: A New Approach. Using Neurofeedback in a Domestic Violence Program* **Level:** Basic ***Joshua Brown, LCSW; Huda Shaikh, LPC-I; Peggy Wright, LPC-S***
9:00 AM-9:10 AM	*Break*	
9:10 AM-10:10 AM	*Exploring the Impact of Single Channel, Bivariate and Multivariate Coherence Training on mu Suppression Deficits in Autism Spectrum Disorders* **Level:** Intermediate ***Janease Traylor, MS & Robert Coben, PhD***	*Does Neurofeedback Reduce the Incidence of Behavioral Incidents in an Adolescent Residential Treatment Facility* **Level:** Intermediate ***J. Michael Griffin, EdD, PhD***
10:10 AM-10:20 AM	*Break*	
10:20 AM-10:50 AM	*The Effects of QEEG Guided Neurofeedback Treatment (NFT) on Patients with Intellectual Disability (ID): A Clinical Case Series With 67 Subjects* **Level:** Intermediate ***Tanju Surmeli, MD***	*The Effects of Side-Effects* **Level:** Basic ***Ainat Rogel, PhD***
10:50 AM-11:00 AM	*Break*	

<table>
<tr><th>Time</th><th colspan="8"></th></tr>
<tr><td>11:00 AM-11:50 AM</td><td colspan="8">Invited Speaker: Iman Mohammad-Rezazadeh, PhD
Assistant Project Scientist II, Department of Psychiatry and Biobehavioral Sciences, Semel Institute for Neuroscience and Human Behavior, UCLA David Geffen School of Medicine

Brain Connectivity and Neural Dynamics - Principles and Applications

Level: Intermediate</td></tr>
<tr><td>11:50 AM-12:00 PM</td><td colspan="8">Break</td></tr>
<tr><td>12:00 PM-1:00 PM</td><td colspan="8">Keynote Speaker: Tomas Ros, PhD
Postdoctoral neuroscientist working at the University of Geneva, Switzerland

Self-organized Criticality as a Theoretical Framework for Neurofeedback

Level: Advanced</td></tr>
<tr><td>1:00 PM-2:00 PM</td><td colspan="8">Lunch on your own</td></tr>
<tr><td>1:00 PM-2:00 PM</td><td colspan="8">Brown Bag Discussion (For Students Only): Newbie Questions You are Afraid to Ask Anywhere Else –ISNR President-Elect, Joy Lunt, RN
in Gardenia</td></tr>
<tr><td>1:30 PM-2:30 PM</td><td colspan="8">NeuroRegulation Associate Editor Meeting in Hydrangea</td></tr>
<tr><td>1:30 PM-5:00 PM</td><td colspan="8">Break- Explore the Exhibit Pavilion for the latest in technology, services and trends in Neurofeedback</td></tr>
<tr><td>2:00 PM-3:00 PM</td><td colspan="8">Small Group Discussions</td></tr>
<tr><td></td><td>Thought Technology Sponsored

TT PSP Suite: Peak Sports Performance Biofeedback Developed In Collaboration With Dr. Pierre Beaucham p

Facilitator: Steven Acoca

in Regency Hall 7</td><td>Deymed Diagnostic Sponsored

Updates: Software Demo and Open Forum for Q&A

Facilitator: Steven Stockdale

in Regency Hall 5</td><td>NFB For Epilepsy - Development Of A Multicenter Database

Facilitator: Lauren Frey

in Regency Hall 6</td><td>How To Get Involved - ISNR Committees And Member Groups

Facilitators: Amber Fasula & Sarah Wyckoff

in Magnolia A-C</td><td>NeuroField, Inc Sponsored

Neurofeedback, pEMF and TDCS/ TACS Combination Therapy

Facilitator: Nick Dogris

in Regency Hall 4</td><td>Neurofeedback For Addictions

Facilitator: Richard Davis

in Regency Hall 3</td><td>Neuromodulation Research

Facilitator: Jon Frederick

in Regency Hall 8</td><td>How Neurofeedback & Biofeedback Have Changed Over The Last Ten Years Due To The Technological (Hardware & Software) Advances

Facilitator: Leigh Richardson

in Regency Hall 9</td></tr>
<tr><td>2:00 PM-6:30 PM</td><td colspan="8">ISNRU Conference Workshop – 4 hours (See Workshop Schedule for Details; Additional Fees Apply)</td></tr>
</table>

Time	
3:15 PM-6:30 PM	***Conference Workshops*** *- (See Workshop Schedule for Details; Additional Fees Apply)*
3:15 PM-6:15 PM	***BCIA Certification Exam in Gardenia*** *For preapproved applicants only - Questions, please contact Judy crawford-jcrawford@bcia.org*
7:00 PM-9:00 PM *9:15 PM-CLOSE*	***Banquet Dinner & Awards Ceremony in GC DEF*** *Join us while we recognize leaders in our profession and those who have contributed to the growing field of Neurofeedback.* ***Casino Night in GC Portico East*** *Back by Popular Demand! Join your colleagues for an evening of fun!*

Sunday, September 25, 2016 -- Annual Conference Schedule

Time	Sunday, September 25, 2016 -- Annual Conference Schedule
8:00 AM-10:00 AM	***Closing Breakfast and Prize Winner Announcements in Exhibit Hall! GC ABC*** Be sure to visit the Exhibit Hall one last time before it closes. You may win one of the Grand Prizes! You MUST be present to win.
10:00 AM-12:00 PM	***Invited Panel:*** **State of the Field - Research and Trends in Neurofeedback and Neuromodulation in GC DEF** ***1. Trends in Clinical work/applications of NFB*** *Presenter: Lauren Frey, MD* ***2. Trends in Research*** *Presenter: Sarah Prinsloo, PhD* ***3. Trends in our field-a look forward*** *Presenter: Anne Stevens, PhD*
12:00 PM-6:00 PM	***Exhibitor Educational Workshops*** • *BrainMaster Technologies, Inc. in GC G* • *Stens Corporation in GC H* • *Thought Technology, Ltd. in GC I* • *Lenyosys in Poinciana A-D*
12:30 PM–1:30 PM	***ISNR Incoming Board of Directors Meeting in Atrium 1412***

2016 ISNR Pre-Conference and Conference Workshop Schedule

*Notes: Workshops designated as **ISNRU** are sponsored by the ISNR Education Committee*
*Workshops designated as **ISNR FOUNDATIONS** are introductory-basic level courses.*

Pre-Conference Workshops – 8 Contact Hours Per Day

(Additional fees apply)

Monday, September 19, 2016

All Pre-Con Workshops are scheduled 8:00am - 5:30pm Includes Continental Breakfast, two 15-minute breaks & hour break for lunch on own (Additional fees apply)			
PCW 1.1	**DAY 1 of 3** – QEEG Didactic Board Certification Course **(3-DAY)** **Level: Intermediate**	**Thomas Collura, PhD; David Cantor, PhD; Harry Kerasidis, MD**	**Regency Hall 1**
PCW 2.1	**DAY 1 of 3** – LENS Foundations Training **(3-DAY)** **Level: Basic**	**Daphne Waldo, RN**	**Regency Hall 5**
PCW 3.1	**DAY 1 of 3** – LENS Advanced Training **(3-DAY)** **Level: Advanced**	**Len Ochs, PhD**	**Regency Hall 3**
PCW 4	NeuroField Advanced Methods **Level: Advanced**	**Nicholas Dogris, PhD; Candia Smith, DMH**	**Regency Hall 2**
PCW 12.1	**DAY 1 of 3** – LENS Intermediate Training **(3-DAY)** **Level: Intermediate**	**Catherine Wills, MSN, RN, CNS**	**Regency Hall 4**

Tuesday, September 20, 2016

All Pre-Con Workshops are scheduled 8:00am - 5:30pm Includes Continental Breakfast, two 15-minute breaks & hour break for lunch on own (Additional fees apply)			
PCW 1.2	**DAY 2 of 3** – QEEG Didactic Board Certification Course **(3-DAY)** **Level: Intermediate**	**Thomas Collura, PhD; David Cantor, PhD; Harry Kerasidis, MD**	**Regency Hall 1**
PCW 2.2	**DAY 2 of 3** – LENS Foundations Training **(3-DAY)** **Level: Basic**	**Daphne Waldo, RN**	**Regency Hall 5**
PCW 3.2	**DAY 2 of 3** – LENS Advanced Training **(3-DAY)** **Level: Advanced**	**Len Ochs, PhD**	**Regency Hall 3**
PCW 5.1	**DAY 1 of 2** – NeuroField PEMF: The Energetic Wave of the Future **(2-DAY)** **Level: Basic**	**Nicholas Dogris, PhD; Candia Smith, DMH**	**Regency Hall 2**
PCW 6	Utilizing Neurofeedback to Train Optimal Performance in Healthy and Athlete Populations **Level: Basic**	**Leslie Sherlin, PhD**	**Regency Hall 6**
PCW 7	An Automated Cognitive QEEG Activation Evaluation Method **Level: Advanced**	**Kirtley Thornton, PhD**	**Regency Hall 7**
PCW 12.2	**DAY 2 of 3** – LENS Intermediate Training **(3-DAY)** **Level: Intermediate**	**Catherine Wills, MSN, RN, CNS**	**Regency Hall 4**

Wednesday, September 21, 2016

All Pre-Con Workshops are scheduled 8:00am - 5:30pm Includes Continental Breakfast, two 15-minute breaks & hour break for lunch on own (Additional fees apply)			
PCW 1.3	**DAY 3 of 3** - QEEG Didactic Board Certification Course **(3-DAY)** **Level: Intermediate**	**Thomas Collura, PhD; David Cantor, PhD; Harry Kerasidis, MD**	**Regency Hall 1**
PCW 2.3	**DAY 3 of 3 - LENS Foundations Training (3-DAY)** **Level: Basic**	**Daphne Waldo, RN**	**Regency Hall 5**
PCW 3.3	**DAY 3 of 3 - LENS Advanced Training (3-DAY)** **Level: Advanced**	**Len Ochs, PhD**	**Regency Hall 3**
PCW 5.2	**DAY 2 of 2** - NeuroField PEMF: The Energetic Wave of the Future **(2-DAY)** **Level: Basic**	**Nicholas Dogris, PhD; Candia Smith, DMH**	**Regency Hall 2**
PCW 8	Neurofeedback QEEG Basics - **ISNR FOUNDATIONS** **Level: Basic**	**Mike Cohen; Glenn Weiner, PhD**	**Regency Hall 6**
PCW 9	Introduction to the Practice of Neurofeedback Assessment Leads to Appropriate Intervention Beginner Level - **ISNR FOUNDATIONS** **Level: Basic**	**Lynda Thompson, PhD; Michael Thompson, MD; Andrea Reid Chung, MA**	**Regency Hall 7**
PCW 10	Current Clinical Applications of EEG-based Assessment and Treatments: sLORETA, Network and Hub Activation, Pulsed Electromagnetic (pEMF) and Integrated Methods **Level: Intermediate**	**Thomas Collura, PhD; Mark Smith, MSW; Penijean Gracefire, MSMHC**	**Regency Hall 8**
PCW 11	Rapid ClinicalQ Assessment and Braindriving **Level: Basic**	**Paul Swingle, PhD**	**Regency Hall 9**
PCW 12.3	**DAY 3 of 3** - LENS Intermediate Training **(3-DAY)** **Level: Intermediate**	**Catherine Wills, MSN, RN, CNS**	**Regency Hall 4**

Afternoon Conference Workshops

You must register for the Annual Conference in order to access these afternoon Conference Workshops. Additional fees apply; 3 contact hours per workshop, unless otherwise noted below.

Thursday, September 22, 2016

All Workshops are scheduled 3:15pm - 6:30pm unless otherwise noted below (Additional fees apply)			
WS 1	Introduction to LORETA Analysis and Neurofeedback - ISNR FOUNDATIONS **Level: Basic**	**Joel Lubar, PhD**	**GC GHI**
WS 2	PAY ATTENTION! How Accurate Assessment Leads to Effective Intervention for Attention Deficit Hyperactivity Disorder (ADHD) - ISNR FOUNDATIONS **Level: Basic**	**Lynda Thompson, PhD; Michael Thompson, MD; Andrea Reid Chung, MA**	**Poinciana A-D**
WS 3	Introduction to QEEG Concepts and Applications - ISNR FOUNDATIONS **Level: Basic**	**Leslie Sherlin, PhD**	**Palm A-F**
WS 4	Client Assessment: QEEG and Assessment Measures - **BCIA NFB Blueprint Section-VI** (ISNRU - 4 HOURS - 2pm-6:30pm) **Level: Intermediate**	**Richard Abbey, PhD; Rachael Little**	**GC DEF**
WS 5	Introduction to Pulsed Electro-Magnetic Field Stimulation with BrainMaster's MicroTesla (2016) **Level: Intermediate**	**John Demos, MA**	**Regency Hall 7**
WS 6	Identifying Relationships Between qEEG, Methylation and Oxidative Stress to Enhance NFB Outcomes **Level: Intermediate**	**Richard Soutar, PhD**	**Regency Hall 3**
WS 7	The Rising Incidence of Eating Disorders: How Neurofeedback Helps with Bulimia and Anorexia **Level: Intermediate**	**Lori Russell-Chapin, PhD; Ted Chapin, PhD**	**Regency Hall 4**
WS 8	Neurofeedback and the Digital Adolescent: Addressing Mental Health Issues In the Age of Mobile Technology **Level: Intermediate**	**Penijean Gracefire, MSMHC**	**Regency Hall 1**
WS 17	QEEG, Neurofeedback and HRV Innovations for Concussions and TBI in Athletes **Level: Intermediate**	**Michael Linden, PhD; Robert Conder, PhD; James Thompson, PhD; George Rozelle, PhD**	**Magnolia A-C**

Friday, September 23, 2016

All Workshops are scheduled 3:15pm - 6:30pm unless otherwise noted below (Additional fees apply)			
WS 9	Instrumentation and Electronics - **BCIA NFB Blueprint Section III** (ISNRU - 4 HOURS - 2pm-6:30pm) **Level: Intermediate**	**Sarah Wyckoff, PhD**	**Regency Hall 1**
WS 10.1	**DAY 1 of 2** - Developing Treatment Protocols - **BCIA NFB Blueprint Section VII (2-DAY)** (ISNRU) **Level: Basic**	**Glenn Weiner, PhD; Mike Cohen**	**GC GHI**
WS 11	BCIA Review Course **Level: Intermediate**	**Lynda Thompson, PhD; Michael Thompson, MD**	**Palm A-F**
WS 12	The New Exposure Therapy: Virtual Reality, HRV, loRETA, pEMF and tDCS **Level: Intermediate**	**Robert Reiner, PhD; Scott Lloyd, PhD; Heather Fichtel, PsyD**	**Regency Hall 4**
WS 13	Sport Related Concussion: Integrating QEEG and Neurofeedback with Best Practices **Level: Intermediate**	**Harry Kerasidis, MD**	**Magnolia A-C**
WS 14	Four Channel Multivariate Coherence Training **Level: Intermediate**	**Robert Coben, PhD; Anne Stevens, PhD**	**GC DEF**
WS 16	Epilepsy, Seizures and Neurofeedback in 2016 **Level: Basic**	**Lauren Frey, MD**	**Regency Hall 8**
WS 26	QEEG & Neurofeedback with ASD **Level: Intermediate**	**Michael Linden, PhD**	**Regency Hall 2**

WS 15 CANCELED - Alpha Theta in the 21st Century - Kerson

Saturday, September 24, 2016

All Workshops are scheduled 3:15pm - 6:30pm unless otherwise noted below (Additional fees apply)			
WS 10.2	**DAY 2 of 2** – Developing Treatment Protocols - **BCIA NFB Blueprint Section VII (2-DAY) (ISNRU) Level: Basic**	**Glenn Weiner, PhD; Mike Cohen**	**GC GHI**
WS 18	Basic Neuroanatomy/Neurophysiology - **BCIA NFB Blueprint Section II (ISNRU - 4 HOURS - 2pm-6:30pm) Level: Basic**	**Rex Cannon, PhD**	**Regency Hall 1**
WS 19	Why Patients get Better Using Neurofeedback + Heart Rate Variability Example: Post-concussion Syndrome **Level: Intermediate**	**Lynda Thompson, PhD; Michael Thompson, MD**	**Poinciana A-D**
WS 20	Combining Loreta Z-Score Neurofeedback, Neurofield, and Cognitive Skills Training to Optimize Outcomes **Level: Advanced**	**Richard Abbey, PhD; Rachael Little**	**Regency Hall 4**
WS 21	Introduction to Brodmann: Function & Symptoms: Training & Assessment Options **Level: Intermediate**	**John Demos, MA**	**Magnolia A-C**
WS 22	RESET Therapy: Rapid Resolution of PTSD, Depression, Anxiety, and Chronic Pain by Acoustical Neuromodulation with the BAUD **Level: Intermediate**	**George Rozelle, PhD; George Lindenfeld, PhD**	**Regency Hall 3**
WS 23	Infraslow Neurofeedback for Substance Abuse & Trauma: Targeting Autonomic Dysregulation **Level: Basic**	**Mark Smith, MSW; Ray McGarty, MA**	**Palm A-F**
WS 24	Brain Functional Networks: Theory and Application **Level: Advanced**	**David Cantor, PhD; Dick Genardi, PhD; Richard Soutar, PhD**	**Regency Hall 2**
WS 25	NeuroMeditation: Combining Neurofeedback with Meditation to Target Specific Mental Health Conditions **Level: Intermediate**	**Jeffrey Tarrant, PhD**	**Regency Hall 9**

8-Hour Pre-Conference Workshop (PCW) Descriptions

Monday, September 19 – Wednesday, September 21, 2016
8:00am - 5:30pm (Additional fees apply)

PCW 1.1, 1.2, 1.3 (3-DAY) QEEG Didactic Board Certification Course
Level: Intermediate
Thomas Collura, PhD, David Cantor, PhD, Harry Kerasidis, MD

This workshop, which is uniquely taught by three QEEG diplomats with diverse backgrounds, provides not only an opportunity to fulfill the QEEG Certification Board requirements, but also provides a broad and up-to-date exposure to the current state of QEEG and neurofeedback. Attendees who are seeking QEEG Board certification, as well as those who have experience in QEEG and neurofeedback will find this a comprehensive and engaging workshop that by definition will include essential material to ensure a solid grasp of current QEEG concepts and methods.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- know the best subject inclusion and exclusion criteria for building a database
- understand fundamental statistical consideration within databases
- have knowledge about t-tests, alpha and P levels, correlational relationships, and z-scores
- understand developmental changes in the EEG
- understand the origins of the EEG
- know what EEG signatures should be referred out to other professionals
- be knowledgeable about Brodmann area functions and network connections
- have an understanding of LORETA interpretation and training
- be knowledgeable about general cognitive and clinical changes that take effect after neurofeedback training based upon publications
- understand how clinical presentation may affect the EEG
- explain sources in the brain from which various frequency bands normally emanate, and their physiological basis
- explain how t-tests, alpha and P levels, correlational relationships, and z-score measures are used in QEEG and in neurofeedback
- explain what defines the various montages and the circumstances of their use
- describe how LORETA and sLORETA-based interpretation and training provide unique capabilities compared to surface metrics
- have a working knowledge of the montages, transforms and power displays along with the specific perspectives they can provide a reader of QEEG output
- understand phase and coherence, how they relate and what they can mean in the interpretation of the QEEG.

PCW 2.1, 2.2, 2.3 (3-DAY) LENS Foundation Training
Level: Basic
Daphne Waldo, RN

This 3-day workshop is a learning arena for the practitioner, which includes essential concepts, core paradigms, principles, and areas of applicability of the Low Energy Neurofeedback System (LENS) and how to integrate the concepts into the practitioner's practice. The workshop will offer hands-on training in the LENS in addition to a foundational knowledge in assessing the client, development of a treatment plan, using the concepts presented and how to reevaluate the effectiveness of the treatment plan.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- state the general and specific concepts of the LENS system
- assess a patient using the evaluation tools of the LENS
- develop a customized treatment plan based upon the assessment and discuss the rationale for the clinical decisions involved in the plan
- use the LENSware3 software to administer a neurofeedback session utilizing the LENS technology.

PCW 3.1, 3.2, 3.3 (3-DAY) LENS Advanced Training
Level: Advanced
Len Ochs, PhD

This 3-day Advanced LENS Training will begin with a review of fundamentals; treatment flow from evaluations to treatment and re-evaluations; understanding Maps and their significance; Advanced offset management; In-depth analysis of LENS Settings and how they relate to the concepts of Sensitivity, Reactivity, Incompletely resolved childhood problems, Advanced management of suppression and over stimulation with time spent on Suppression Maps; Clarification of differences between aberrant reactions, background medical problems, and releases of suppression/necessary transitional states.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- state the reason why a 1-tailed repeated measure t-test was used to demonstrate significant pre-post differences in any measured EEG activity within an average of 5 ***BodyLENSTM*** sessions to reduce pain and inflammation
- define the components of the OchsLabs ***BodyLENSTM*** system to allow (1) technical and clinical oversight of the quality of treatments, including support for children, (2) anonymity of data, and (3) double-blinded randomized clinical trials
- define paradoxical feedback as a way to disrupt the mechanism that perpetuates chronic pain in the periphery with no neurofeedback applied.

PCW 12.1, 12.2, 12.3 (3-DAY) LENS Intermediate Training
Level: Intermediate
Catherine Wills, MSN, RN, CNS

This Intermediate Training is focused on Practitioners who already are using the LENS. Specifically, it builds on the LENS Foundations Training by expanding the concepts didactic presentations covering the in depth use of the LENS combined with class discussion. Complex cases will be presented and the attendees will develop treatment plans based on the new information presented.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

1) Differentiate among different types of reactivity as related to the LENS treatment
2) Develop customized treatment plans for complex clients using the presented materials and discuss the reasoning for the choice in the planning.
3) Discuss how the LENS is used in combination with other adjunctive therapies.

Monday, September 19, 2016
8:00am - 5:30pm (Additional fees apply)

PCW 4 NeuroField Advanced Methods
Level: Advanced
Nicholas Dogris, PhD, Candia Smith, DMH

In this dynamic one-day presentation Dr. Nicholas Dogris and Dr. Candia Smith will present the state of the art of NeuroField pEMF & tDCS/tACS stimulation technology. NeuroField. Inc has created a dynamic suite of devices to impact deregulations in EEG. Attendees at this workshop who have a basis in NeuroField treatment will learn the art of combining Cross Frequency Coupling techniques with HRV created protocols, tACS/tDCS, and pEMF techniques for impacting network function. Protocols utilizing frequencies from acupuncture and ancient healing will be discussed as applied to modern scientific methods.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- demonstrate knowledge of tDCS/tACS and its clinical utility.
- demonstrate understanding of HRV as a method for protocol building.
- demonstrate understanding of the Network structure of the cortex and implications for neurofeedback training.

Tuesday, September 20 – Wednesday, September 21, 2016
8:00am - 5:30pm (Additional fees apply)

PCW 5.1, 5.2 (2-DAY) NeuroField PEMF: The Energetic Wave of the Future
Level: Basic
Nicholas Dogris, PhD, Candia Smith, DMH

Pulsed Electomagnetic Field (PEMF) therapy is emerging as a powerful modality in Neurofeedback practice. In this two-day course, clinicians will gain an understanding of the NeuroField system's ability to affect changes in our clients' EEG to targeted goals, such as changes in coherence, amplitude and network functioning. Case histories, lecture and reference materials will assist in demonstrating the ways NeuroField is used in conjunction to other forms of NeuroFeedback and as a standalone intervention.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- describe the effect of pEMF on cortical function as measured by the QEEG
- distinguish between dehabituation, entrainment and operant conditioning
- demonstrate understanding of measurement of pEMF.

Tuesday, September 20, 2016
8:00am - 5:30pm (Additional fees apply)

PCW 6 Utilizing Neurofeedback to train Optimal Performance in Healthy and Athlete Populations
Level: Basic
Leslie Sherlin, PhD

This workshop will introduce and provide the foundation for a brain performance evaluation and training model for healthy and high performers including athletes. Practical barriers that have been overcome through significant technological developments and outcomes from individual clients and preliminary group studies will be addressed. Collecting quantitative electrocortical activity and neuropsychometric data on hundreds of athletes and providing psychophysiological training to many of those consisting of professional, Olympic and world-class level individuals has provided some preliminary insights into this modality usage in the non-clinical population. Measuring and training the healthy brain has provided significant understanding of training processes that now can be applied to mental performance that is both practical and effective. The refinement of training implementation strategies across a wide variety of performance settings for all skill levels has yielded preliminary indications of success in these populations. In summary, this workshop will cover the historical research applicable, the theory and definitions utilized in optimal performance, a model for utilizing training in healthy and high performing populations and lot of hands on demonstration of in-session techniques through actual NFB session in workshop.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- identify historical theoretical research in EEG operant conditioning and biofeedback applicable to healthy and high performing individuals
- ask interview questions and incorporate QEEG data for identifying opportunities in training protocols
- list basic protocols applicable to healthy populations and expected outcomes.
- list steps in conducting a neurofeedback session with a healthy or high performing client.

PCW 7 An Automated Cognitive QEEG Activation Evaluation Method
Level: Advanced
Kirtley Thornton, PhD

This workshop will explain / demonstrate the software which is 1) a predominantly automated cognitive activation QEEG evaluation method and 2) biofeedback software which a) employs the 64 Hertz frequency range, b) employs normative values across the tasks, c) understands the correlation between cognitive performance and the QEEG variables. The justification of the approach resides in the superior clinical results obtained with it for auditory and reading memory.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- conduct a QEEG cognitive activation evaluation
- understand the basic principles behind the value of this type of evaluation
- have a better understanding of the advantages of the method
- understand how to employ the different intervention options based upon deviation from normative reference group and value of flashlight, processing unit and holographic concepts.

Wednesday, September 21, 2016
8:00am - 5:30pm (Additional fees apply)

PCW 8 Neurofeedback QEEG Basics **(ISNR FOUNDATIONS TRACK)**
Level: Basic
Mike Cohen, Glenn Weiner, PhD

This workshop is for anyone new to neurofeedback. This course helps fill in the gaps regarding QEEG, EEG and the basics of neurofeedback. The terminology is explained and shown SLOWLY, step by step. We encourage attendees to ask the most BASIC questions.

We focus on helping attendees understand a small number of key concepts well. Our goal is to slow it down till you really get it.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- understand EEG basics. What is beta/alpha/theta/etc.? What does it tell us? How do we use it? What is a "slow" or "fast" EEG? Making sense of those squiggly lines
- understand how neurofeedback really works? What's the equipment do? How does the brain respond?
- how do you decide/target what to train? Does the EEG/qEEG tell all? Can you target key brain areas/issues without a qEEG? Intro to multiple models of training and protocols.
- qEEG simplified. What are the basic concepts needed for beginners? How does it guide training? If you give a EEG or qEEG to 5 experts, how many opinions would you get? Are there different "flavors" of qEEG? A discussion of options – including how to learn more.
- understand there are very different points of view in the field about the type of training? From single channel vs multi-channel vs low frequency, vs z score, coherence, etc.?
- understand how medications affect neurofeedback and vice versa? Nutrition?
- Learn what outcomes providers expect and get from neurofeedback? When does it not work?

PCW 9 Introduction to the Practice of Neurofeedback Assessment Leads to Appropriate Intervention Beginner Level **(ISNR FOUNDATIONS TRACK)**
Level: Basic
Lynda Thompson, PhD, Michael Thompson, MD, Andrea Reid Chung, MA

This workshop will allow people new to the field to become conversant with terminology and basic concepts so that they will be able to understand material they will encounter during the rest of the conference and it will provide the ground work for further training. It will also introduce them to evidence-based practice with respect to assessment and treatment planning.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- identify the location of the 19 sites of the International 10 – 20 System for Electrode Placement
- list the EEG bandwidths according to Greek letter designations, along with frequency bands associated with delta, theta, etc. and describe typical mental states associated with activity in each of these band widths at the Cz site
- explain how the practitioner applies basic principles of learning theory (operant conditioning and classical conditioning) during each training session with a client
- explain how the differential amplifier allows the practitioner to accurately assess brain waves while minimizing many major artifacts
- describe common EEG findings found in children who have a diagnosis of ADHD
- list the steps for placing electrodes on the scalp (CZ) and earlobes with good impedance readings for both referential (monopolar) and sequential (bipolar) montages
- while looking at data from a single channel EEG assessment, identify common artifacts in the EEG, such as those related to eye-blinks and muscle tension
- based on the client's symptoms and their single-channel EEG data, make an appropriate decision as to which bandwidths to enhance or inhibit when training that client
- outline some characteristics of clients who would require a 19-channel EEG assessment and have a basic understanding of how these are interpreted, including coherence measures and use of LORETA
- define the term 'Brodmann Area' and describe the general location of 4 BAs that are important (and likely the source of EEG activity that is outside database norms) in common disorders such as ADHD, Dyslexia, Anxiety, and Depression
- list potential side effects of neurofeedback and biofeedback with an emphasis on over-breathing/hyperventilation
- define 'z-score' and be familiar with how z-scores are used in EEG assessment and training.

PCW 10 Current Clinical Applications of EEG-based Assessment and Treatments: sLORETA, Network and Hub Activation, Pulsed Electromagnetic (pEMF) and Integrated Methods
Level: Intermediate
Thomas Collura, PhD, Mark Smith, MSW, Penijean Gracefire, MSMHC

This workshop provides clinically relevant information describing current methods that extend conventional neurofeedback with additional techniques. Attendees will gain clinically useful information including demonstrations and peer-reviewed evidence supporting efficacy. There will be an opportunity for hands-on work, and attendees will be exposed to the growing evidence base for emerging therapeutic methods.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- describe how qeeg assessment data is combined with symptom and behavioral data to construct a brain-based intake
- explain how neurofeedback protocols that target specific EEG amplitude and connectivity parameters can be expected to lead to clinically significant functional change in clients
- explain how brain connectivity is reflected in QEEG measurements and in clinical presentation, and how changes in brain connectivity are reflected in client outcomes
- articulate the principles of sLORETA brain activation imaging and neurofeedback in clinical practice
- describe the principles of infra-slow fluctuations (ISF) and the literature base supporting its interpretation and use.

PCW 11 Rapid ClinicalQ Assessment and Braindriving
Level: Basic
Paul Swingle, PhD

This workshop will focus on the ClinicalQ intake assessment procedure that rapidly identifies clinical symptoms and the putative neurological mechanism associated with client's complaints. Attendees will be able to immediately implement these assessment and treatment procedures into their practices. Therapeutic procedures complementary to neurotherapy will be demonstrated.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- learn rapid diagnostic procedures
- interpret QEEG data
- identify common QEEG signatures for disorders
- recognize EEG patterns for trauma
- determine conditions requiring full QEEG
- identify contra indicators for aggressive treatment
- determine conditions suitable for potentiating treatment options
- learn braindriving techniques.

Afternoon Conference Workshop (WS) Descriptions

Thursday, September 22, 2016
3:15 - 6:30pm (Additional fees apply)

WS 1 Introduction to LORETA Analysis and Neurofeedback **(ISNR FOUNDATIONS TRACK)**
Level: Basic
Joel Lubar, PhD

The employment of LORETA for evaluation of the quantitative EEG and its implementation for neurofeedback is becoming a dominant component and the development of Neurotherapy. The results for many clinical disorders can be obtained in many fewer sessions than with traditional single electrode neurofeedback. It is important therefore that people new to the field have the opportunity to learn about this very important treatment modality.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- help attendees to understand the basis for LORETA, and how it is measured
- see how a 19 channel EEG is obtained from a participant, evaluated, how artifact is removed, and protocol for treatment developed
- observe and understand how a LORETA neurofeedback session is organized, presented, and evaluated
- see the validation of LORETA training for patients with different clinical disorders.

WS 2 PAY ATTENTION! How Accurate Assessment Leads to Effective Intervention for Attention Deficit Hyperactivity Disorder (ADHD) **(ISNR FOUNDATIONS TRACK)**
Level: Basic
Lynda Thompson, PhD, Michael Thompson, MD, Andrea Reid Chung, MA

ADHD is the most frequent Disorder seen by pediatricians, with 1 in 7 boys in the USA being diagnosed with ADHD by age 18. For neurofeedback providers, working with ADHD makes sense because there is a large population to be served and neurofeedback, done appropriately, has been shown to be an effective intervention. The emphasis on multimodal intervention is one strength in this talk and attendees can benefit from the clinical experience of the presenters who have been working with children with ADHD since the 1970's. Thus there will be lots of clinical tips for practitioners.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- list and describe appropriate assessment tools for ADHD
- outline the contributions of different assessment measures to the prescription of treatment interventions
- state the most frequently used EEG parameters for improving attention span and concentration
- describe the rationale for increasing sensorimotor rhythm (SMR) and the method for doing this in patients who are hyperactive and impulsive
- give frequencies used in the Monastra – Lubar Theta – Beta Power Ratios
- state why you would do some training on task to include metacognitive strategies in a training session
- describe how to include one metacognitive strategy in a child's training session.

WS 3 Introduction to QEEG Concepts and Applications **(ISNR FOUNDATIONS TRACK)**
Level: Basic
Leslie Sherlin, PhD

This workshop is designed to teach the basic concepts in Quantitative Electroencephalography (QEEG). This is a highly interactive course covering the QEEG from electrode placement to interpretation. All participants will learn electrode placement, recording techniques, visual inspection of the EEG. The course will additionally cover QEEG analysis and the use of statistics and databases for interpretation. The participant will be exposed to a variety of analysis techniques and will be given an understanding of basic concepts such as amplitude, power, coherence and advanced concepts such as Low Resolution Electromagnetic Tomography (LORETA) for interpreting the QEEG. Research and clinically relevant interpretive techniques will be included. This workshop will focus on the understanding the basics of QEEG acquisition, analysis and interpretation. Advanced concepts will be introduced however this workshop is not advanced.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- identify historical theoretical research in QEEG analytics
- define basic QEEG concepts
- implement a stepwise process for interpreting QEEG data
- identify EEG artifacts and their contribution to the QEEG output.

WS 4 Client Assessment: QEEG and Assessment Measures - **BCIA NFB Blueprint Section-VI**
(ISNRU - 4 HOURS- 2pm – 6:30pm)
Level: Intermediate
Richard Abbey, PhD & Rachael Little

This introductory-level workshop will expose participants to foundational qEEG recording practices, 19-channel surface and LORETA z-score training, and a comprehensive overview of interpreting qEEG. The first half will focus on patient assessment, utilizing comprehensive 19-channel recordings, continuous performance measures, and other baseline tests. In the second half, we will cover new-patient assessment, including assessment of symptoms, exploration of relevant history, conditions amenable to neurofeedback, goals, the effects of medication on EEG, and physiological correlates of psychological conditions. Ongoing client monitoring will be covered as well, including adjustment of treatment parameters and useful methods of progress monitoring.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- learning basics of EEG recording and analysis
- understanding the procedures involved in capping and recording EEG
- analyzing the data and interpreting qEEG, and utilizing ongoing assessments to monitor client progress.

WS 5 Introduction to Pulsed Electro-Magnetic Field Stimulation with BrainMaster's MicroTesla (2016)
Level: Intermediate
John Demos, MA

Pulsed Electromagnetic Field (pEMF) therapy has been used for over 100 years: countless peer reviewed articles have been published showing its efficacy in body based treatments. Brain-based pEMF is now available and moreover it is simple to use via z-score automated protocols. Learn the fundamentals of pulsing therapies and observe live demonstrations with BrainMaster's Microtesla. This workshop will be helpful for all professionals who use BrainMaster products such as Atlantis. Also, professionals who are searching for additional treatment interventions to help with trainees who respond poorly to traditional biofeedback interventions.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- learn place pEMF stim coils and electrodes montages
- master Avatar software set-up and activation of pEMF and photic interventions.

WS 6 Identifying Relationships Between qEEG, Methylation and Oxidative Stress to Enhance NFB Outcomes
Level: Intermediate
Richard Soutar, PhD

This workshop will review the qEEG as a proxy measure of physiological phases related to arousal, oxidative stress, and inflammatory process. It will provide examples of each stage of this sequence of phases and relate it to different disorders. It will identify the initial impact of oxidative stress in the form of excitotoxicity due to chronic hyperarousal of the CNS and its progression into inflammatory response and the resulting impact on the electrophysiology of the brain. The resulting deficits in nutritional resources characterized by each of these stages will be discussed as well as the methylation difficulties that typically emerge from this process.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- will be able to identify the physiological phases of qEEG
- predict the underlying metabolic issues related to those phases
- identify the mental disorders related to those phases
- predict the methylation problems related to those phases.

WS 7 The Rising Incidence of Eating Disorders: How Neurofeedback Helps with Bulimia and Anorexia
Level: Intermediate
Lori Russell-Chapin, PhD, Ted Chapin, PhD

This workshop will address the integration of neurocounseling with neurofeedback by sharing two complicated eating disorder case studies. Pre-test and post-test data from self-reports and qEEG's will be shared for one client with bulimia and one client with anorexia. Customized protocols of biofeedback and single channel and dual channel TAG will be shown with a discussion of TCD as well. Results will be shared.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- identify the physiological correlates underpinning eating disorders
- discuss the types of NFB protocols that have been efficacious in treating eating disorders
- analyze two severe yet successful eating disorder cases
- observe one 5 and one 19 channel EEG from these cases
- understand the basics of thalamocortical dysrhythmia in many brain illnesses.

WS 8 Neurofeedback and the Digital Adolescent: Addressing Mental Health Issues in the Age of Mobile Technology
Level: Basic
Penijean Gracefire, MSMHC, LMHC

Adolescents as a demographic are uniquely vulnerable to the stressors which can accompany chronic use of mobile technology. Poorly developed self-regulation mechanisms contribute to a spectrum of mental health issues related to excessive internet use, not only during adolescence, but often impacting quality of personal and professional life later in adult years. qEEG and neurofeedback are particularly suited to potentially identify and address the atypical underlying neurophysiological patterns, supporting improved self-regulation and reduced stress. This workshop will offer strategies to optimize both the evaluation and the treatment process for clinicians working with adolescents.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- identify the impacts on mental health among adolescents which have emerged over the last thirty year
- introduce a framework in which to evaluate the evolving social and emotional needs of adolescents navigating their current environment
- discuss the increasing relevance of neurofeedback interventions which include qEEG mapping, up-to-date normative references, connectivity variables and volume imaging techniques
- develop treatment strategies which take into consideration the unique stressors introduced through chronic use of mobile technology by adolescents.

WS 17 QEEG, Neurofeedback and HRV Innovations for Concussions and TBI in Athletes
Level: Intermediate
Michael Linden, PhD, Robert Conder, PhD, James Thompson, PhD, George Rozelle, PhD

Recently, football players have been developing dementia and CTE from the head injuries. There is urgency for more precise and accurate methods for assessing athletes. Research is demonstrating QEEG and ERP are sensitive for diagnosis and treatment monitoring.

Neurofeedback and Biofeedback can be effective treatments for head injuries in athletes of all ages. Heart Rate Variability Biofeedback is used to improve the physiological effects. Ultra Pulse Low Voltage Stimulation is being studied with retired NFL players with Dementia and showing promising results. Neurofeedback and biofeedback for concussions/TBI can be individualized and lead to not only quicker return to play, but emotional, cognitive and memory improvements.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- learn how QEEG and ERP are useful in the diagnosis of Concussions and TBI
- identify how HRV can be a successful in reducing the psychological effects of TBI
- learn how Neurofeedback can be successful in treating the cognitive and neurological effects of TBI
- Discuss how QEEG and ERP are useful in diagnosing Concussions and TBI.

Friday, September 23, 2016
3:15 - 6:30pm (Additional fees apply)

WS 9 Instrumentation and Electronics **- BCIA NFB Blueprint Section III (ISNRU - 4 HOURS-**
2pm – 6:30pm)
Level: Basic-Intermediate
Sarah Wyckoff, PhD

This workshop is targeted towards clinicians, researchers, students, and individuals pursuing BCIA Neurofeedback Certification. Participation in this workshop will prepare attendees for questions associated with this didactic area on the BCIA NFB Certification exam. Based on the content of this presentation, the attendees will be able to (1) meet the BCIA Neurofeedback Certification blueprint didactic requirements for Instrumentation and Electronics (Section III), (2) demonstrate knowledge of basic metrics and terminology related to EEG electronics and instrumentation, (3) demonstrate practical skills and knowledge of basic procedures and terminology related to EEG signal acquisition, and (4) demonstrate practical skills and knowledge of basic procedures and terminology related to EEG signal acquisition.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- meet the BCIA Neurofeedback Certification blueprint didactic requirements for Instrumentation and Electronics (Section III)
- demonstrate knowledge of basic metrics and terminology related to EEG electronics and instrumentation
- demonstrate practical skills and knowledge of basic procedures and terminology related to EEG signal acquisition
- demonstrate practical skills and knowledge of basic procedures and terminology related to EEG signal acquisition.

Friday, September 23 & Saturday, September 24, 2016
3:15 - 6:30pm (Additional fees apply)

WS 10.1, 10.2 (2-DAY) Developing Treatment Protocols - **BCIA NFB Blueprint Section VII (ISNRU)**
Level: Basic
Glenn Weiner, PhD, Michael Cohen

There are many ways to do neurofeedback. This workshop will review the various ways that it is being done and the supportive research behind them. We will also present numerous case examples showing the decision process in selecting protocols based upon client assessment data. Depending upon participants interests we can discuss the protocol decision process for patients from our clinics with PTSD; OCD; ADHD; Chronic Pain; Depression; Autism; Epilepsy; and Migraines.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- develop an understanding of early SMR, Beta and Alpha/Theta protocols that are still being used
- develop an understanding of how to choose reward and inhibits
- identify key components for protocol selections based on qEEGs
- understanding of what protocols are research based—and what are not
- Participants will develop an understanding as to when to change protocols.
- develop an understanding as to the pros and cons of various type of feedback (e.g. DVD vs simple games vs. numerical feedback vs complex games, etc.)
- develop an understanding of issues related to manual vs. autothresholding, and reinforcement rates
- learn to use client's responses to treatment to make protocol adjustments.

Friday, September 23, 2016
3:15 - 6:30pm (Additional fees apply)

WS 11 BCIA Review Course
Level: Intermediate
Lynda Thompson, PhD & Michael Thompson, MD

This workshop is for those who intend to take the BCIA exam the course will provide a reasonable sample of the domain of knowledge needed to perform well. The BCIA Review workshop moves very rapidly. It is meant as a review for intermediate to advanced practitioners who may wish to take the accreditation examination at some point in the future and for others who wish to review their theoretical and practical knowledge in the field. It gives an ONLY AN OVERVIEW of some of the BASIC PUBLISHED fundamentals as outlined in the BCIA Blueprint of Knowledge.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- outline methodology for EEG data collection and interpretation using common terms including: referential, sequential, and laplacian montages; active, reference, and ground electrodes, digital versus analogue recording, QEEG, LORETA
- list key facts concerning instrumentation terms including: impedance versus resistance, differential amplifier, sampling rates, high and low pass filters
- list and describe common artifacts including: eye movement, muscle tension, cardiac, cardioballistic, electrode movement
- draw and relate key features of normal and abnormal waveforms
- list common findings in disorders where neurofeedback is used including: Seizure disorders, ADHD, anxiety, depression, post-concussion
- outline how learning theory (especially operant conditioning) applies to EEG biofeedback.
- list 3 Brodmann Areas that are common targets of NFB intervention and name a disorder where that area is important
- describe levels of efficacy for NFB,
- define event related potential (ERP) and describe the importance of latency and amplitude with one example (e.g., ADHD, concussion, or dementia),
- list and describe 4 basic ethical principles
- define basic statistical terms
- name 5 structures that comprise the Basal Ganglia
- name 4 neural networks
- define SDNN and describe how heart rate variability training can improve this measurement.

WS 12 The New Exposure Therapy: Virtual Reality, HRV, loRETA, pEMF and tDCS
Level: Intermediate
Robert Reiner, PhD, Scott Lloyd, PhD, Heather Fichtel PsyD

Virtual reality is now considered the gold standard for exposure training in the treatment of phobic anxiety. Success rates climbed from 60% to over 90% when biofeedback training (HRV and NeuroField pEMF) was added to the virtual reality protocol. Mean lengths of treatment for the two most common requests from our patients (fear of flying and public speaking phobia) is 12 to 16 sessions. Back in the 90's many healthcare professionals shied away from purchasing early virtual reality hardware and software systems because of the expense, which was over $15,000. We have figured out strategies to easily build "exposure" systems that now cost less than $1,000. Professional therapists completing this training will be able to incorporate Virtual Reality and Biofeedback into their practices, a skill set both immensely rare and valuable. It is estimated that less than a handful of mental health professionals in all of New York City offer these powerful strategies. And with increased costs associated with use of cutting edge instrumentation/equipment, professional fees are two to three times higher than for conventional psychotherapy or stand-alone neurofeedback/biofeedback. This workshop will be very much "hands-on". Starting with a brief presentation of the history of how our "thinking" about desensitization via graded exposure emerged from academic learning theory, we will take you through a series "possibilities", treatment choices, actually, ending with our current approach (es). The workshop is highly interactive and many videos will be shown, bringing the presentation to life. Furthermore, several sets of Virtual Reality headmounted displays will be provided so that participants will be able to experience what it feels like to enter Virtual Reality. Many cases will be presented, which will serve as teaching tools, of how we mix and match the "exposure" parts of the intervention with the particular type of biofeedback. Our virtual reality program is made by Virtually Better. Biofeedback systems include 8 channel encoders from Thought Technology. These include EEG, EMG, pIR, GSR/EDR, HR/BVP,TEMP,RSA (HR variability), and RESP. NeuroField (Q20, 3000x/HRV), Brainmaster, NeuroGuide, Stress Eraser, Respirate, will all be presented and reviewed. The pros and cons of using stand-alone VR systems vs web based systems will be discussed and demonstrated.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- learn how to setup and implement virtual reality systems in clinical practice
- learn how the use of HRV, pEMF and tDCS can be integrated as a priming mechanism to help weaken the association between the feared stimulus and the autonomic nervous system's visceral response
- identify loRETA neurofeedback related implications of post-treatment maintenance of self-regulation within the anxiety networks using fMRI referenced treatment planning.

WS 13 Sport Related Concussion: Integrating QEEG and Neurofeedback with Best Practices
Level: Intermediate
Harry Kerasidis, MD

Sport related concussion is a common brain injury. Neurotherapists can take a pivotal role in the entire process of concussion management, and assume a leadership role in their community as the go to resource for concussion care. This workshop will review the state-of-the-science of sport concussion, including pathophysiology of the injury, pre-season evaluations, post injury assessments, and therapeutic interventions. The workshop will emphasize the integration of QEEG and neurotherapy technology, and provide a model for an integrative approach to setting up a sport concussion clinic.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- define concussion injury
- list at least one basic pathophysiologic principle of concussion injury at macroscopic, microscopic and molecular levels
- recognize at least 5 signs and 5 symptoms of concussion injury
- identify 4 unique features of sport related concussion
- identify the 3 phases of concussion management
- identify frequently observed findings on QEEG analysis of acute and chronic concussion injury
- consider neurotherapy treatment options for acute and chronic post-concussion cases.

WS 14 Four Channel Multivariate Coherence Training
Level: Intermediate
Robert Coben, PhD, Anne Stevens, PhD

Participants will learn of the limitations of bivariate coherence assessment and how multivariate approaches can solve these. Demonstrations of advanced connectivity assessment will be provided. Theory and evidence will be provided to inform those in attendance about his new approach to neurofeedback. Details regarding four channel multivariate coherence neurofeedback will be provided, demonstrated efficacy in several populations and case examples. Participants will come to understand this advanced approach to neurofeedback capable of leading to rapid changes in brain synchronization patterns.

In this workshop we will present detailed information regarding the measurement of coherence and connectivity, demonstrations of this approach to multivariate coherence training, and understanding of this approach as an evidence based practice. Discussion of the merits and challenges associated with this form of intervention will be presented.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- understand the differences between bivariate and multivariate coherence approaches
- appreciate multivariate coherence assessment techniques
- appreciate this new form of neurofeedback will be provided
- receive education regarding the demonstrated efficacy of this approach.

CANCELED - WS 15 Alpha Theta in the 21st Century. A look at how and why clinicians have evolved from the original Peniston Protocol**- Kerson**

WS 16 Epilepsy, Seizures and Neurofeedback in 2016
Level: Basic
Lauren Frey, MD

Epilepsy affects an estimated 2.2 million people in the United States alone and is the nation's fourth most common neurological disorder, after migraine, stroke, and Alzheimer's disease (IOM, 2012). Seizures are caused by aberrant connections within the brain that result in hyperexcitable networks. Neurofeedback training can modify these hyperexcitable networks. Given the prevalence of seizures and epilepsy, ISNR meeting attendees can expect to have these patients in their practices and may benefit from an in-depth review of the literature to date.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- describe the most common clinical epilepsy syndromes
- explain how the published data might inform choice of patient and specific protocol for seizure-focused neurofeedback training
- describe the common baseline findings on QEEG in patients with epilepsy
- name two common QEEG-based neurofeedback targets for patients with epilepsy.

WS 26 QEEG & Neurofeedback with ASD
Level: Intermediate
Michael Linden, PhD

The prevalence of Autism has increased dramatically to epidemic proportions, however there is no biological diagnostic test to date and there remains no successful pharmacological treatment. Aspergers remains highly undiagnosed in both children and adults, many who are extremely bright. Many students with Aspergers are misdiagnosed at having ADHD and Oppositional Defiant Disorder and prescribed stimulant medication which worsens their symptoms.
The use of QEEG to discover subtypes ASD and related ADD and anxiety is vital for accurate diagnosis and successful treatment. Neurofeedback candidate selection, protocol development and treatment decisions will be explained that lead to successful outcomes. We will review and discuss how to best determine and select which treatment (s) is best for which patient, including which treatment to begin with in order to have the most successful results. QEEG and CPT case study data and research studies will be presented including significant research in these areas and recent studies on the effects of Neurofeedback on MRI and DTI with Autistic students.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- Discuss the QEEG subtypes of Autism, Aspergers and co-morbid disorders such as ADHD, anxiety and
  ODD and how they differ and overlap
- Understand how to use CPT tests and QEEG to monitor treatment effects of medications
  and neurofeedback
- Use QEEG and computerized testing to guide neurofeedback selection and protocol development
- Apply neurofeedback strategies and techniques for Autism and Aspergers

Saturday, September 24, 2016
3:15 - 6:30pm (Additional fees apply)

WS 18 Basic Neuroanatomy/Neurophysiology **(ISNRU - 4 HOURS- 2pm – 6:30pm)**
Level: Basic
Rex Cannon, PhD

This workshop will provide an introduction to the central nervous system, its anatomy and neurophysiology. It will cover the brain and our current understanding of EEG, networks, neural plasticity, neural efficiency and associated mechanisms. Current methods of visualizing the brain will also be covered, including Magnetic Resonance Imaging (MRI), functional magnetic resonance imaging (fMRI), volumetric (vMRI), Single Photon emission computerized tomography (SPECT), Positron Emission Tomography (PET), Computerized Tomography (CT/CAT) and low-resolution electromagnetic brain tomography (LORETA) – with summary of benefits and limitations. The brain and its mechanisms will be reviewed with latest research findings. The workshop will cover orientation & directions; ventricles and CSF; neural Development and learning; forebrain – cerebral cortex, limbic system, basal ganglia, thalamus, hypothalamus; midbrain – tectum, tegmentum; hindbrain – cerebellum, pons, medulla oblongata; Spinal Cord & PNS as well as functional associations for cortical and subcortical structures. Neurophysiology, methods of measurement and interpretations of such data will also be covered including limitations of all procedures. Common sources of EEG will be discussed as well as definitions of traditional EEG measures; including amplitude, magnitude, coherence, phase and co-modulation. Benefits and limitations will also be covered.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- understand the structure/anatomy of the brain
- familiarity with neuroimaging tools and limitations
- understanding of EEG measures and definitions

WS 19 Why Patients get Better Using Neurofeedback + Heart Rate Variability Example: Post-concussion Syndrome
Level: Intermediate
Lynda Thompson, PhD & Michael Thompson, MD

This workshop will enable participants to understand the importance of doing a thorough assessment of their patient in order to adequately design a multi-modal intervention that includes a combination of neurofeedback and biofeedback. It will show how even a single channel assessment plus a stress assessment of physiological variables can give the foundations for intervention. After a head injury and in other complex cases, however, it may be preferable to use 19 channel EEG plus LORETA analysis and that approach will be reviewed.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- state how heart–brain connections link to symptoms seen after a TBI
- list the components of an assessment
- state why ERPs are useful in assessment and for following the progress of treatment
- state why a stress assessment is helpful for the patient and how the results can be used to plan intervention
- describe how one channel NFB is combined with HRV training to treat patients who present with post-concussion syndrome
- define what a Brodmann Area is and briefly describe the location and functions of some key BAs: 24, 25, 31 and also BA 39 & 40 in both the dominant and non-dominant hemispheres
- define the term fasciculus and describe the connections of the uncinate fasciculus and of the cingulum in broad general terms
- state why LORETA z-score NFB combined with HRV may be the preferred intervention for some clients with post-concussion syndrome
- outline some of the neuroanatomical connections of the nucleus of the solitary tract to other nuclei and areas in the brain that may be influenced by both neurofeedback and HRV training
- outline the link between a head injury and changes in cardiac functioning, as measured by heart rate variability
- define diffuse axonal injury and list the major biochemical changes that can occur at the synaptic junctions after a concussion that are associated with DAI.

WS 20 Combining Loreta Z-Score Neurofeedback, Neurofield, and Cognitive Skills Training to Optimize Outcomes
Level: Advanced
Richard Abbey, PhD, Rachael Little

There have been many recent advancements in Loreta z-score neurofeedback, Neurofield, and cognitive skills training. We will cover the latest techniques of each of these methods, and we will also discuss the benefits of combining these techniques for optimal outcomes. In this workshop, participants will learn about cognitive skills training, and why it is important is an important adjunct therapy in improving brain functioning. Protocol selection and the timing of these therapies will also be discussed, determining whether to do them sequentially or in combination. Case studies will be reviewed.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- learn the latest advancements in Loreta z-score neurofeedback with NeuroGuide
- learn about the latest advancements in Neurofield, including CFC protocols and protocol generation
- learn about cognitive skills training and why it is important in combining these techniques with neurofeedback for best outcomes
- participants will learn about how to determine whether cognitive skills training is appropriate for their clients.

WS 21 Introduction to Brodmann: Function & Symptoms: Training & Assessment Options
Level: Intermediate
John Demos, MA

The introduction of sLORETA 3D imaging software for assessment and training has opened up a new vista of research and clinical advancement for neurofeedback providers. Learning the basics of Brodmann with cortical and sub-cortical regions is the first step to success with this new technology. Additionally, it is essential to have an accurate definition of brain networks in training applications.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- learn how Korbinian Brodmann's research benefits neurofeedback providers
- learn how sLORETA imaging identifies cortical and sub-cortical areas
- understand the function of key Brodmann & Regions of Interest locations
- understand how to pair Brodmann/ROI's with several clinical disorders
- learn the functions and dynamics and location of the "Triple Network"
- learn the definition of Diffuse Tensor Imaging (DTI) and current density connectivity
- Learn how Jewel Protocol Generator software can upload training locations to BrainAvatar
- use the Jewel Report Writing Software.

WS 22 RESET Therapy: Rapid Resolution of PTSD, Depression. Anxiety, and Chronic Pain by Acoustical Neuromodulation with the BAUD
Level: Intermediate
George Rozelle, PhD, George Lindenfeld, PhD

Every day 22 veterans commit suicide, many of them because of unresolved PTSD. Some give up while waiting for VA services. Others find that treatments offered are ineffective. Their PTSD may trigger them every day and interfere with their ability to function in civilian life. The authors will present an effective brief intervention using a neuromodulation device that neurofeedback clinicians can inexpensively add to their practice with appropriate training. Pre and post QEEG data will be presented as evidence of immediate and lasting functional changes through resetting the fear switch in the brain. his will be a didactic and experiential workshop designed to give clinicians a sound foundation for the mechanisms of action and effective implementation of RESET Therapy. Pre and post QEEG data will be presented to support the effectiveness of the technique. Participants will have an opportunity to observe the process.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- understand the neuromechanisms involved in PTSD and other conditions
- understand the clinical rationale for an acoustical neuromodulation approach
- learn the basic techniques for rapid resolution of PTSD
- learn about other clinical applications.

WS 23 Infraslow Neurofeedback for Substance Abuse & Trauma: Targeting Autonomic Dysregulation
Level: Basic
Mark Smith, MSW, Ray McGarty, MA

Nearly two thirds of people seeking treatment for substance abuse disorder report one or more traumatic life events. Substance-users report rates of physical assault and witness to serious injury or death at a nearly three times higher rate than do individuals in the general population. Individuals with co-morbid substance abuse and PTSD frequently have a greater difficulty maintaining sobriety and a decreased ability to resolve traumatic memories. Neurofeedback, particularly ISF neurofeedback, can be an alternative strategy to calm fear driven anxiety produced by an Autonomic Nervous system dysregulated by traumatic stress and help reduce recidivism in treatment.

The workshop will focus on the clinical use of ISF neurofeedback with a co-morbid substance abuse/PTSD population to promote abstinence through the reduction of traumatic stress. This will be a didactic presentation that will categorize symptoms, identify specific biological obstacles and specify interventions. Both presenters have worked extensively in the recovery community and in neurofeedback. They will share their individual clinical experiences through the lens of current research and case examples.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- describe the biology of addiction and trauma
- categorize the neural networks of trauma and addiction
- distinguish models of neurofeedback for treating addiction
- target commonly dysregulated neural networks in co-morbid Substance Abuser/PTSD with neurofeedback.

WS 24 Brain Functional Networks: Theory and Application
Level: Advanced
David Cantor, PhD, Dick Genardi, PhD, Richard Soutar, PhD

Neurotherapy clinicians are seeking scientifically relevant and improved approaches to facilitate functional improvement in the patients they serve. The history and current stats of the research regarding brain functional networks have been complex and questionable. This workshop provides important information for conference attendees as they are become oriented to these more advanced methods in neurofunctional treatment in order to help decipher and potentially adopt protocols for the treatment of their patients.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- name at least three prominent networks common across several models
- describe the hubs of the Default Mode Network
- know the fundamental concept behind graph theory
- describe cross frequency communication in the context of networks adaptability
- devise a strategy for a network based protocol.

WS 25 NeuroMeditation: Combining Neurofeedback with Meditation to Target Specific Mental Health Conditions
Level: Intermediate
Jeffrey Tarrant, PhD

In this program, we will explore four different meditation practices based on the role of attention, intention, brainwave states and brain regions involved. Based on these differences, we will identify which practices might be best suited for particular goals. In this way, it is possible to link each meditation with specific mental health concerns as a therapeutic intervention. This workshop will provide research and practical strategies to approach each of the meditative styles. It will demonstrate introductory approaches to standard and sLORETA neuromeditation protocols to achieve deeper states of meditation or as a treatment intervention for mental health conditions.

Learning Objectives:
Based upon the content of this presentation attendees will be able to:

- describe the 4 different styles of meditation
- match client goals to specific meditation styles
- explain how each style fits with specific mental health concerns
- design neurofeedback protocols for each style
- identify at least 3 adjunctive strategies to assist in the NeuroMeditation process.

Exhibitor Educational Workshop (EWS) Descriptions

(complimentary to attend; Register at the vendor's exhibit booth)

Sunday, September 25, 2016
12pm – 6pm

EWS 1 – BRAINMASTER, Brain-based Assessment & Neurofeedback Training for the 21st Century Workshop

WHAT IS NEW WITH BRAINMASTER FOR 2016?

Freedom 24 channel dry EEG
Why BrainAvatar
New Screen and Displays
Live sLORETA Projector and Training
Multiple databases
Capit_oCognitive Assessment

NEW – OCCULUS DEMO'S
Demonstrations and Q&A
Echo Demonstration
Muse Mood Demonstration
2D/3D Raw Maps and Z-maps
Live Z-Score Training and Z Plus
MicroTesla Micro Stimulator Introduction
ZBuilder individualized Z-Scores

Limited Seating, Late lunch!
You do not have to own any hardware in order to attend! Please register via email at: sales@brainm.com or reserve your workshop seat at the BrainMaster Platinum booths to attend this complimentary BrainMaster workshop.

$200.00 Gift Certificate
Registered attendees of the Sunday workshop will receive a complimentary gift certificate good towards BrainMaster Direct Products.

EWS 2 – Stens Corporation and Mind Media BV

Discover multimodal (q)EEG, SCP Neurofeedback and Virtual Reality.
What more can you get out of combining (q)EEG with skin conductance, temperature, EMG, breathing and HRV? Learn more about Multimodal Stress Testing, Brain Mapping, Z-Score training including 19 channel, LORETA, Slow Cortical Potentials (< 1 Hz), EEG Frequency Band Training and all other applications our versatile NeXus systems and BioTrace+ Software have to offer. Also get a glance at doing biofeedback and neurofeedback in combination with Virtual Reality by Zukor.

Register and receive a 10% extra discount on a Stens Workshop. Limited seating! Register via sales@stens-biofeedback.com or at our exhibit booth.

EWS 3 - Thought Technology, Ltd.

Slow Cortical Potentials Suite: Overview & Clinical perspectives.
Join **Steven Acoca, PhD** for a complete overview of Thought Technology's **Slow Cortical Potentials Suite**. The topics that will be covered will include its design, features & a hands on demonstration on its use in a clinical setting. In addition, **Linda Walker, MHR, LPC** will conduct a special segment on Slow Cortical potentials neurotherapy and its clinical applications. The workshop will help clinicians understand the research base & theoretical underpinnings of SCP therapy, as well as its integration into a practical clinical intervention. Limited seating! Register at our exhibit booth.

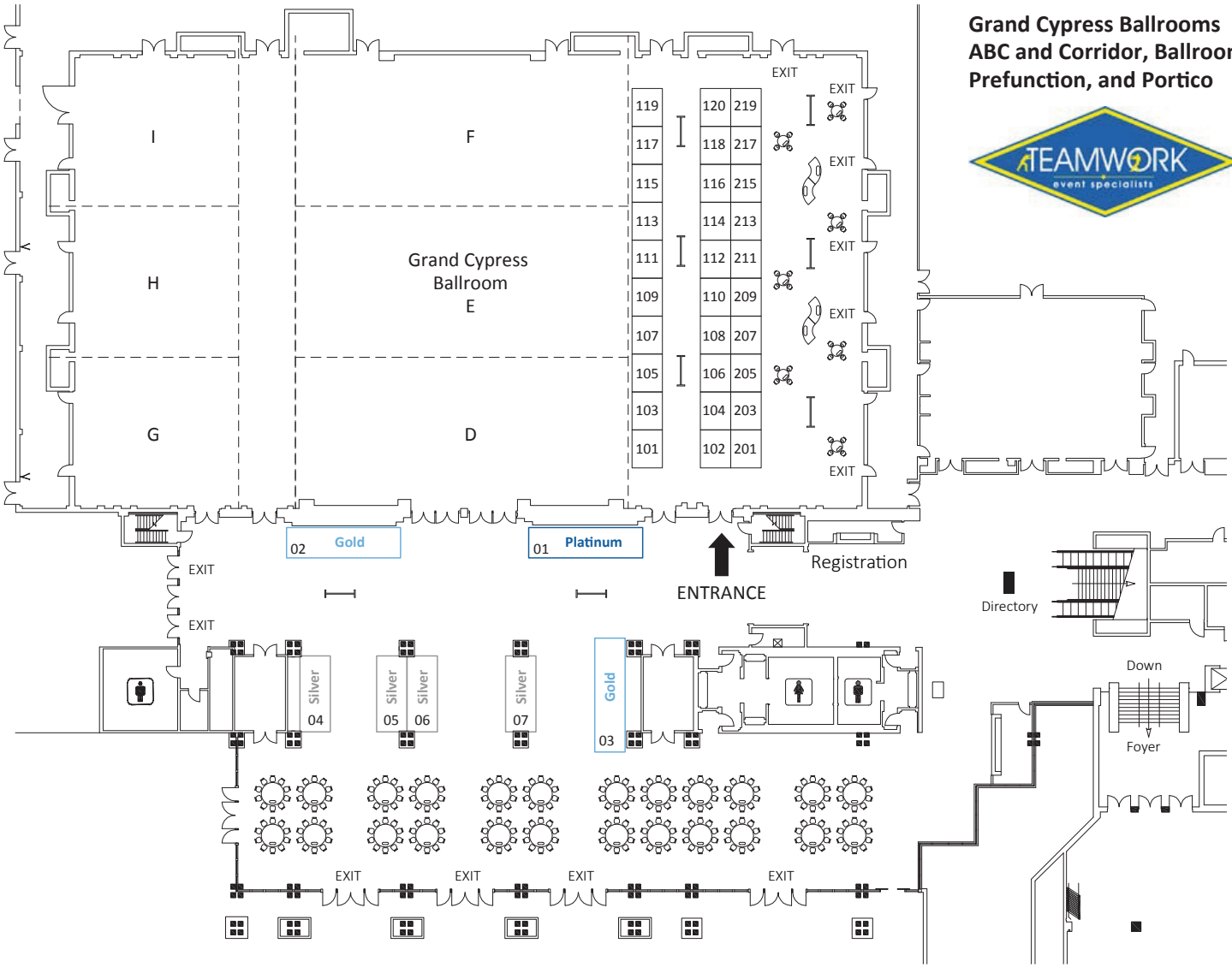
EWS 4 – Lenyosys

Lenyosys Bioregulation Therapy Workshop
Bioregulation Therapy (BRT) uses advanced Pulsed Magnetic Field (PEMF) technology to enhance neurofeedback. • Learn about BRT technology and applications – and how to integrate BRT into your practice • Speak with practitioners already using BRT to improve client results. • Two sessions to choose from: 1:00 pm OR 3:00 pm • 1:00-4:30 pm – personal BRT sessions.

EXHIBITORS

As of 9.15.16

Booth #	Exhibitor
1	BrainMaster Technologies, Inc. (Platinum Sponsor)
2	Integrated Neuroscience Services (Gold Sponsor)
3	Deymed Diagnostic (Gold Sponsor)
4	Thought Technology, Ltd. (Silver Sponsor)
5	Bio-Medical Instruments, Inc. (Silver Sponsor)
6	Stens Corporation (Silver Sponsor)
7	Applied Neuroscience, Inc. (Silver Sponsor)
101	NeuroField, Inc.
102-104	Vielight, Inc.
103	The Biomat Store, LLC
105	New Mind Technologies
106	Nova Tech EEG, Inc.
107	International Society for Neurofeedback & Research (ISNR)
108	Biofeedback Certification International Alliance (BCIA)
109	ENZO Nutraceuticals, Ltd.
110	EEG Store
111	CNS Vital Signs
112	CogniSens, Inc.
113	Neuron Spectrum
114	Biocomp Research Institute
115	Association For Applied Psychophysiology and Biofeedback (AAPB)
116	ANT-NORTH AMERICA
117	BrainMaster Express
118-120	OchsLabs, Inc.
119	Lenyosys
201	BrainTrain, Inc.
203	Electromedical Products International, Inc.
205-207	Foundation for Neurofeedback & Neuromodulation Research (formerly the ISNR Research Foundation)
209	NeuroEducation
211	BetterFly Neurofeedback
217	Fitlight Corp
219	Mind-Brain Training Institute



ISNR 2016 Continuing Education Information:

BCIA
Hour-for-hour recertification credit will be offered for all educational workshops and sessions except for the informal small group discussions, brown bag lunch discussions, and poster presentations.

Satisfactory completion
Participants must complete an attendance/evaluation form in order to receive a certificate of completion/attendance. Your chosen sessions must be attended in their entirety. Partial credit of individual sessions is not available.

Physician
This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Amedco and the International Society for Neurofeedback & Research (ISNR). Amedco is accredited by the ACCME to provide continuing medical education for physicians.

Amedco designates this live activity for a maximum of 50.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Psychologists
This course is co-sponsored by Amedco and the International Society for Neurofeedback & Research (ISNR). Amedco is approved by the American Psychological Association to sponsor continuing education for psychologists. Amedco maintains responsibility for this program and its content. 50.75 hours.

Social Workers
Amedco, #1346, is approved as a provider for social work continuing education by the Association of Social Work Boards (ASWB) www.aswb.org, through the Approved Continuing Education (ACE) program. Amedco maintains responsibility for the program. ASWB Approval Period: 6/24/2016 to 6/24/2019. Social workers should contact their regulatory board to determine course approval for continuing education credits.

Social workers participating in this course may receive up to 50.75 clinical continuing education clock hours.

New York Social Worker
Amedco SW CPE is recognized by the New York State Education Department's State Board for Social Work as an approved provider of continuing education for licensed social workers #0115. 50.75 hours.

Florida Board of Behavioral Sciences
Amedco is approved by the Board of Clinical Social Work, Marriage & Family Therapy, and Mental Health Counseling. Provider BAP#39-Exp.3-31-2017. 50.75 Hours

Reciprocity options for NBCC Professionals:

Professional Counselors in these states can submit APA = AK, AR, AZ, CA, CO, CT, DC, DE, FL, GA, IA, ID, IL, IN, KY, KS, ME, MO, NC, ND, NH, NE, NJ, NM, NV, OK, OR, PA, RI, SC, SD, TN, TX, UT, VA, WI, WY

Professional Counselors in these states can submit ASWB = AK, AL, AR, AZ, CA, CO, CT, DC, FL, GA, IA, ID, IL, IN, KS, ME, MO, ND, NE, NM, NH, NV, OK, PA, TN, TX, UT, VA, WI, WY

MFT's in these states can submit APA = AK, AR, AZ, CA, CO, CT, DE, FL, IA, ID, IN, KS, ME, MO, NE, NC, NH, NM, NJ, NV, OK, OR, PA, SC, SD, TN, TX, UT, VA, WI, WY

MFT's in these states can submit ASWB = AK, AR, AZ, CA, CO, FL, IA, ID, IN, KS, ME, MO, NC, NE, NH, NM, NV, OK, PA, TN, TX, UT, VA, WI, WY