The Science of Self-Regulation: Established and Emerging Evidence
MARCH 15-18, 2017
LOEWS CHICAGO O’HARE HOTEL
CHICAGO, ILLINOIS
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Ever since its foundation (1992), Mind Media has been a pioneer in providing smart and versatile solutions for biofeedback and neurofeedback. We empower professionals to assess and train human behavior and neurophysiology for improving health and performance. Our NeXus line is the #1 choice for thousands of researchers, clinicians and therapists world-wide.

Mind Media is very proud to have Stens Corporation as an exclusive distributor of NeXus for the United States and Canada. Stens Corporation continues to provide innovative and cutting-edge solutions and unique, hands-on training to practitioners. Well over 15,000 individuals have graduated from Stens Professional Certificate Program, contributing to its leadership in the biofeedback field. More info: www.stens-biofeedback.com

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emWave Pro Plus combines emWave Pro with two heart rate variability (HRV) assessments: the one-minute HRV Deep Breathing Assessment with age-related reference values, and the HRV Assessment which provides a range of standard time- and frequency-domain HRV parameters.

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Welcome

Association for Applied Psychophysiology & Biofeedback (AAPB), the pioneering professional society devoted to education and research in this field, welcomes you to its 48th Annual Scientific Meeting.

The goal of this conference is to bring clinicians, physicians, researchers and professionals involved with biofeedback and applied psychophysiology together to exchange information, ideas, scientific data and to share experiences. Biofeedback is a process that enables an individual to learn how to change physiological activity for the purposes of improving health and performance. Precise instruments measure physiological activity such as brainwaves, heart function, breathing, muscle activity and skin temperature. These instruments rapidly and accurately “feed back” information to the user. The presentation of this information — often in conjunction with changes in thinking, emotions and behavior — supports desired physiological changes. Over time, these changes can endure without continued use of an instrument. Hot topics in biofeedback encompass HRV, Neurofeedback, Optimal Performance.

Our dynamic schedule of presenters and subject matter categorization was designed with YOU — applied psychophysiology and biofeedback professionals — in mind. At the meeting, you will:

- **Learn** effective practices, practical ideas, and innovative solutions in sessions covering hot topics, basic science, clinical interventions, interpersonal communications and optimal performance
- **Connect** with vendor partners who offer a wealth of information on new products, services and solutions for your needs
- **Engage** with professionals who share common interests
Annual Scientific Meeting highlights include:

- **6 Keynote Sessions** featuring WORLD renowned scientists and practitioners:
  - **Charles Raison, MD** Mary Sue and Mike Shannon Chair for Healthy Minds, Children & Families and Professor, School of Human Ecology, and Professor, Department of Psychiatry, School of Medicine and Public Health, University of Wisconsin-Madison
  - **Daniel Amen, MD** Neuroscientist, physician, double board certified psychiatrist, and ten-time New York Times bestselling author, Amen Clinics, Amen Publishing
  - **Chris Morris, PhD** University of Kentucky Athletics Department as the Director of Performance Science
  - **President’s Lecture**
    - **Bessel van der Kolk, MD** Medical Director, Principal Investigator, Trauma Center professor of psychiatry at Boston University Medical School
  - **Thomas Collura, PhD, BCN** Clinical Director, Brain Enrichment Center
  - **Robert Thatcher, PhD** President, Applied Neuroscience, Inc.
  - **2017 Distinguished Scientist Lecturer – Ute Strehl, PhD** University of Tbingen, Institute of Medical Psychology and Behavioral Neurobiology

- **22 Pre-conference Workshops** on Wednesday, March 15 - Thursday, March 16, 2017
- **Over 40 Breakout Sessions** that include a variety of panels, symposia and lectures
- **Poster Abstract Viewing** featuring a wealth of research will be exhibited onsite
- **Exhibit Hall and Networking Receptions** to allow you to meet and collaborate with those who share an interest in biofeedback
- **MAXIMUM 37 total program APA CE credits** allows you to get the lion’s share of required credits for licensures and certifications
CONFERENCE TRACKS and LEVELS

The meeting sessions are categorized into the following TRACKS, to allow you to select those sessions that are most relevant to you.

Basic Science (All Levels): Applied Psychophysiology and Biofeedback are objective and evidence-based fields. They are grounded in an understanding of several related disciplines; neurophysiology, neuroanatomy, cognitive psychology, neuropsychology, cardiovascular physiology, respiratory physiology, public health and others. AAPB supports and encourages research that contributes to the development and growth of applied psychophysiology and biofeedback and the program committee is seeking quality research from any discipline linked to biofeedback or applied psychophysiology. These sessions focus on underlying mechanisms and may be experimental or descriptive or literature reviews.

Clinical Interventions and Optimal Performance: Sessions in this track target licensed clinicians working with patients as well as performance trainers and educators working with clients. These sessions provide evidence for successful biofeedback training options. The presentations typically involve patients wanting specific therapeutic treatments and interventions to address clinically diagnosed problems or, healthy clients wanting to improve overall functioning seeking techniques and approaches to enhance optimal performance.

Hot Topics: Presentations featured in this track are focused on new ideas, technological advances, challenges and new applications of psychophysiological science. These sessions will provide a venue for more speculative thinking as well as information on developments from other disciplines that could impact the way we conduct biofeedback. The emerging area of portable, miniaturized, wearable or implantable sensors is one example of a Hot Topic.

All session LEVELS are categorized as Introductory, Intermediate, Advanced and All. Complete information, including session descriptions, learning objectives, presenter bios, associated risks, practice GAP correction analysis and more are available online at www.aapb.org, in full compliance with APA and AMA continuing education requirements.
The Association for Applied Psychophysiology and Biofeedback (AAPB) was founded in 1969 as the Biofeedback Research Society. The goals of the association are to promote a new understanding of biofeedback and advance the methods used in this practice. AAPB is a non-profit organization as defined in Section 501(c)(6) of the Internal Revenue Service Code.

**Mission**
AAPB promotes and represents the science and practice of self-regulation to enhance health and performance

**Vision**
To integrate self-regulation into everyday life

**Strategic Goals**
- Public Awareness
- Standardization
- Membership Growth
- Innovation

Contact us at: info@aapb.org or 800.477.8892.

**CONTINUING EDUCATION**

Psychologists: AAPB is approved by the American Psychological Association (APA) to offer continuing education for psychologists. AAPB maintains responsibility for this program and its content. The AAPB 48th Annual Scientific Meeting offers a MAXIMUM of 37 hours.

BCIA Recertification: Hour-for-hour attendance in breakout sessions and workshops may be used to fulfill the continuing education requirement for recertification with the certificate of attendance.

**Accreditation Statement:** 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 Association for Applied Psychophysiology & Biofeedback (AAPB). Amedco is accredited by the ACCME to provide continuing medical education for physicians.

**Credit Designation Statement:** Amedco designates this live activity for a maximum of 36.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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The AAPB Distinguished Scientist Award is presented annually “in recognition of an outstanding career and scientific contribution to the field of applied psychophysiology and biofeedback.” This award recognizes a scientist who has advanced Biofeedback through a significant body of research conducted, as judged by publications, awards and peer reviews, and has made a major impact upon the field of study, both nationally and/or internationally. Nominees must hold a doctoral degree in a psychology, biomedical science, medicine, or other health-related field. Recipients are selected based on the following evaluation criteria:

- Scientific importance of research discoveries
- Mentorship of students, postdoctoral fellows, and new faculty
- Continued impact on the field

The Distinguished Scientist Award winner will present at the 2017 Annual Scientific Meeting on Saturday, March 18 at 5:15pm - 6:30pm. Be sure to support Dr. Ute Strehl in this monumental achievement by attending her special presentation:

**Is Neurofeedback of Slow Cortical Potentials in Children with ADHD Specific? A Summary of Design and Results of the German Multicenter Study on SCP-Feedback**

**ABOUT OUR RECIPIENT:**

Ute Strehl, PhD, is a licensed clinical psychologist and Assistant Professor (Emeritus) at the Institute for Medical Psychology and Behavioral Neurobiology of the Eberhard-Karls University of Tübingen, Germany. Her research focuses on the development of behavioral treatments for
neurological disorders such as Epilepsy, Parkinson’s Disease and Attention Deficit-Hyperactivity Disorder. She is the recipient of multiple awards for her teaching, research, and publications. In 2010 she was honored by the Biofeedback Foundation of Europe with the “Exceptional Achievement Award” for outstanding contribution to the EEG field through her research on Slow Cortical Potentials. Among other publications, she authored the “EEG-Primer” and “Biofeedback of Slow-Cortical Potentials” chapters in the newest edition of the well-known “Biofeedback: A Practitioner’s Guide,” edited by Schwartz & Andrasik.

Dr. Ute Strehl joins the following group of distinguished individuals. Past awardees include:
1995 - Neal Miller, PhD
1996 - Niels Birbaumer, PhD
1997 - John Basmajian, MD
1998 - Edward Taub, PhD
1999 - Johann Stoyva, PhD and Tom Budzynski, PhD
2000 - Angele McGrady, PhD
2001 - Bernard T. Engel, PhD
2002 - Frank Andrasik, PhD
2003 - Edward Blanchard, PhD
2004 - M. Barry Sterman, PhD
2005 - Paul Lehrer, PhD
2006 - Joel Lubar, PhD
2007 - Susan Middaugh, PhD
2008 - Richard Gevirtz, PhD
2009 - John Arena, PhD
2010 - Alan Glaros, PhD
2011 - Steven Wolf, PhD, PTA, PT
2012 - Julian F. Thayer, PhD
2013 - Erik Peper, PhD
2014 - Steven Baskin, PhD
2015 - Estate Sokhadze, PhD
2016 - Michael Thompson, MD; Lynda Thompson, PhD

AAPB Chapter of the Year
Southeast Biofeedback Society

Outstanding Contribution to Student Development
Paul Lehrer, PhD

Presidential Recognition Award
Jonathan Walker, PhD

Lifetime Achievement Award
Donald Moss, PhD
2017 FERB Student Travel Scholarship Recipients

Shane Colombo Columbia University
Ashlie Bell Saybrook University
Jay A. Bhavsar Rutgers University
Jarenice Bravo Saybrook University
Andrea De Barros Brigham Young University
Kristin Jamieson Saybrook University
Monica Joy San Francisco State University
Darlene Lee Bastyr University of California of Naturopathic Medicine
John Locke East Carolina University
Lauren Mason San Francisco State University
Donna Schuman Univ. Texas-Arlington
Khushbu Shah Rutgers University
Mark Stern Alliant University
Tara Austin Brigham Young University
Allison Beachum East Carolina University
Aaron Craven East Carolina University
Robert Huseby Rutgers University
Karenjot Kaur Yeshiva University
Emily Reames East Carolina University
Phillip Sgobba Rutgers University
Shawn Rich East Carolina University
Jerrelle Rich East Carolina University
Kyle Roebuck East Carolina University
Guela Sokhadze University of Louisville
Carolyn Trasko Saybrook University

2017 FERB Scientific Grant Recipients ($1500 awards)

Frank Perry, Boston University
Examining the Effects of a Mindfulness-Based Biofeedback Intervention on Self-Regulation and Sport Performance in Collegiate Soccer Athletes

Kayla Herbell, Case Western Reserve University
Psychophysiological Stress in Pregnant Women: Correlates with Maternal Mental Health

2017 BCIA Francine Butler Scholarship Recipients

BCIA is proud to announce the list of 2017 Francine Butler Scholarship award winners. This is our largest award class to date as it represents 10 students from 7 different universities. Please welcome them to the field – they are the future!

• From Saybrook University, recommended by Don Moss, PhD, BCB, BCN: Carolyn Trasko
• From CSPP/Alliant University, recommended by Richard Gevirtz, PhD, BCB: Kelly McCarthy and Nick Stelmach
• From East Carolina University, recommended by Carmen Russoniello, PhD, LPC, BCB, BCN: Aaron Craven, John Locke and Emily Reames
• From the University of North Florida, recommended by Chris Branciere, MS, BCB: Mikaela Raley
• From Truman State University, recommended by Fred Shaffer, PhD, BCB: Zachary Meehan
• From Brigham Young University, recommended by Patrick Steffen, PhD, BCB: Tara Austin
• From the University of Denver, recommended by Lindsay Shaw Thornton, PhD, BCB, BC: Emily Clark
This meeting would not be possible without the dedication, passion and ongoing efforts of the following individuals:

Patrick Steffen, PhD  
Committee Co-Chair  
Associate Professor  
Brigham Young University

Inna Khazan, PhD  
Committee Co-Chair  
Harvard Medical School

Richard Harvey, PhD  
AAPB Past President  
Committee Board Liaison  
Associate Professor  
San Francisco State University

Thomas Collura, PhD  
AAPB Past President  
BrainMaster Technologies, Inc.

Judy Crawford  
Biofeedback Certification International Alliance

Jay Gunkelman, QEEGT  
Brain Science International

Urszula Klich, PhD  
My Mindful Way of Life, LLC

Christine Moravec, PhD  
Cleveland Clinic Foundation

Christine Sanchez, PhD, CC-AASP  
Quarterline

Gabriel Sella, MD, MPH, MSC, PHD  
AAPB President-elect  
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### Exhibit Hours

**Thursday, March 16**
- Exhibitor Set-up: 8:00am to 12:00pm
- Exhibits Viewing: 2:00pm to 6:30pm
- Opening Reception in Exhibit Hall: 7:45pm to 9:30pm

**Friday, March 17**
- Exhibits Viewing: 7:00am to 6:00pm
- Presidential and Poster Reception: 7:30pm to 9:30pm

**Saturday, March 18**
- Exhibits Viewing: 7:00am to 2:00pm
- Exhibitor Teardown: 2:00pm to 5:30pm

### Registration Hours

<table>
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<td>Tuesday, March 14</td>
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**Be sure to visit the exhibitors in the Guggenheim Ballroom.**

**A wealth of knowledge awaits....**
Tuesday, March 14

Registration Open
Grand Foyer
5:00pm - 7:00pm

Wednesday, March 15

Registration Open
Grand Foyer
7:00am - 7:00pm

Pre-Conference Workshop Attendee ONLY
Continental Breakfast
Louvre 2 Pre-function area
7:00am - 8:00am

Pre-Conference Workshops (Admission to pre-conference workshops are by ticket only. Tickets may be purchased at the registration counter.)

FULL DAY WORKSHOPS

Beginning at 8:00am — all full day sessions will be concluded by 5:00pm or 5:30pm

Time: 8:00am-5:30pm
Room: Louvre 1
WS01: Heart Rate Variability Biofeedback: Principles and Practice Part I
Presenters: Fredric Shaffer, PhD, BCB; Donald Moss, PhD
Level: Introductory
Track: Clinical Interventions and Optimal Performance
CE Credits: 7.5
** This full-day workshop fulfills 7.5 hours of BCIA's Certificate of Completion in Heart Rate Variability (HRV) Biofeedback didactic blueprint and provides a practical introduction to this exciting modality.

Time: 8:00am-5:00pm
Room: Louvre 2
WS02: NeuroField pEMF, tACS, tDCS, tRNS and EEG Neurotherapy – Part 1
Presenter: Nicholas Dogris, PhD, BCN, QEEG-D
Level: Intermediate, Advanced
Track: Clinical Interventions and Optimal Performance, Hot Topics
CE Credits: 7
WS03: Stimulation Technologies – Audio-visual Entrainment, Cranio-electro Stimulation and Transcranial DC Stimulation – Physiology and Clinical Outcomes
Presenter: Dave Siever, CET
Level: Intermediate
Track: Basic Science, Clinical Interventions and Optimal Performance, Hot Topics
CE Credits: 7

WS04: Advanced Neurofeedback Concepts
Presenters: Cynthia Kerson, MA; John LeMay, MA
Level: Advanced
Track: Clinical Interventions and Optimal Performance
CE Credits: 7

WS05: Current Clinical Applications of EEG-based Assessment and Treatments: sLORETA, Network and Hub Activation, pEMF and Integrated Methods
Presenters: Thomas Collura, PhD; Penijean Gracefire, MA
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
CE Credits: 7

HALF - DAY WORKSHOPS (AM)

WS06: Intelligence and EEG Information Flow: Efficiency
Presenter: Robert Thatcher, PhD
Level: Intermediate
Track: Basic Science, Clinical Interventions and Optimal Performance, Hot Topics
CE Credits: 4

12:00pm-5:00pm
Exhibit Hall & Poster Set-up by Decorator

12:00pm-1:00pm
Lunch Break – ON YOUR OWN
HALF - DAY WORKSHOPS (AFTERNOON)

Time: 1:00pm to 5:00pm
Room: Gallery 624
WS07: BCIA Review
Presenters: Lynda Thompson, PhD, CPsych, BCN; Michael Thompson, MD
Level: Intermediate-Advanced
Track: Basic Science
CE Credits: 4

Time: 1:00pm - 5:00pm
Room: Teylers
WS08: The Role of Astroglia in Neurofeedback and its Globalization Effect
Presenter: Hanno Kirk, LICSW, PhD
Level: All
Track: Basic Science and Hot Topics
CE Credits: 4

HALF - DAY WORKSHOPS (EVENING)

Time: 5:30pm to 9:30pm
Room: Gallery 624
WS09: Foundational Breathing Essentials Beyond Biofeedback
Presenters: Brad Lichtenstein, ND, BCB; Cindi Lee Hope, ND, BCB
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
CE Credits: 4

Time: 5:30pm to 9:30pm
Room: Gallery 424
WS11: QEEG Guided Assessment and Neurofeedback for ADD and Autistic Spectrum Disorder
Presenter: Michael Linden, PhD
Level: Intermediate
Track: Basic Science, Clinical Interventions and Optimal Performance
CE Credits: 4

Time: 5:30pm to 9:30pm
Room: Louvre 2
WS12: General Introduction to Biofeedback Peripherals
Presenter: Jon Bale, BS, BCN-T
Level: Introductory
Track: Basic Science (All Levels)
CE Credits: 4
WS13: Motor Control: The Cinderella of Psychophysiology
Presenter: Jeffrey Bolek, PhD
Level: Introductory
Track: Clinical Interventions and Optimal Performance
CE Credits: 4

Thurs., March 16

Registration Open
Grand Foyer
7:00am - 7:00pm

Pre-Conference Workshop Attendee ONLY
Continental Breakfast
Louvre 2 Prefunction
7:00am - 8:00am

Exhibitor Move-In
Guggenheim Ballroom
8:00am-12:00pm

Pre-Conference Workshops (Admission to pre-conference workshops are by ticket only. Tickets may be purchased at the registration counter.)

FULL DAY WORKSHOPS

Time: 8:00am-5:30pm
Room: Louvre 1
WS14: Heart Rate Variability Biofeedback (HRVB): Principals and Practices Part 2
Presenters: Paul Lehrer, PhD; Richard Gevirtz, PhD
Level: Introductory
Track: Clinical Interventions and Optimal Performance
CE Credits: 7.5
** This full-day workshop fulfills 7.5 hours of BCIA's Certificate of Completion in Heart Rate Variability (HRV) Biofeedback didactic blueprint and provides a practical introduction to this exciting modality.

Time: 8:00am-5:00pm
Room: Louvre 2
WS15: NeuroField pEMF, tACS, tDCS, tRNS and EEG Neurotherapy – Part 2
Presenter: Nicholas Dogris, PhD, BCN, QEEG-D
Level: Intermediate / Advanced

Wednesday/Thursday
WS16: Optimizing Performance with Biofeedback and Mindfulness
Presenter: Inna Khazan, PhD, BCB
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
CE Credits: 7

WS17: Stress and Its Management: Nuts, Bolts and Wrenches
Presenter: Jan Newman, MD, MA, FACS, ABIHM
Level: All
Track: Basic Science
CE Credits: 7

HALF - DAY WORKSHOPS (AM)

WS18: The Academy of Ancient Practices and Associations: Evolutionary Approaches to Well-Being
Presenters: Charles Raison, MD; Urszula Klich, PhD, BCB; Saundra Jain
Level: Intermediate
Track: Clinical and Optimal Performance
CE Credits: 4

WS19: Optimizing Sleep - From Insomniacs to Elite Performers
Presenter: Shona Halson, PhD
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
CE Credits: 4

WS20: ADHD + Comorbidities: Accurate Assessment leads to Effective Multi-modal Treatment
Presenters: Michael Thompson, BSc, MD, DPsych, CRPC©; Lynda Thompson, PhD, CPsych, BCN

Thursday
Level: Intermediate  
Track: Basic Science  
CE Credits: 4

12:00pm-1:00pm  
Lunch Break – ON YOUR OWN

Time: 12:00pm-2:00pm  
AAPB Board Meeting

HALF- DAY WORKSHOPS (AFTERNOON)

Time: 1:00pm to 5:00pm  
Room: Gallery 524  
WS21: Change Your Brain, Change Your Life  
Presenters: Daniel Amen, MD, Board Certified, American Board of Psychiatry and Neurology, General Psychiatry  
Level: All  
Track: Basic Science  
CE Credits: 4

Time: 1:00pm to 5:00pm  
Room: Teylers  
WS22: Bio-feedback, Virtual Reality and other techniques used to facilitate the suppression of Anxiety  
Presenters: Robert Reiner, PhD, BCB, BCN; Scott Lloyd, PhD; Heather Davidson  
Level: Intermediate  
Track: Hot Topics / Clinical Interventions and Optimal Performance  
CE Credits: 4

Time: 1:00pm to 5:00pm  
Room: Gallery 424  
WS23: DON’T SLOUCH! BREATHE! How Posture and Breathing Impacts Health and Performance  
Presenters: Erik Peper, PhD  
Level: Intermediate  
Track: Hot Topics  
CE Credits: 4
CONFERENCE Kick off

Exhibits Open
Guggenheim Ballroom
2:00pm-6:30pm
During the Annual Meeting, be sure to visit the Expo Hall for the latest information on the equipment, products and services you need to practice biofeedback more effectively and efficiently. Don’t miss this opportunity to speak one-on-one with representatives from those organizations that support the field and AAPB.

KEYNOTE PRESENTATION
Time: 6:30pm-7:45pm
Room: Louvre 3
KEY1: Ancient Therapeutics and Sensory Pathways as Deep Brain Stimulators: Implications for the Treatment of Major Depression
Presenter: Charles Raison, MD
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
CE Credits: 1

This talk takes as its starting point a disagreement with the current orthodoxy in psychiatric research that mental illnesses are brain disorders. While not minimizing the importance of the central nervous system, in this talk we explore how adopting a different perspective—that of embodied cognition—suggests that conditions such as major depression are systems-based disorders caused by factors that are complex, dispersed and interdependent. Far from being a mere squabble over abstractions, this talk suggests that adopting a “brain only” perspective forecloses a number of novel treatment options. We demonstrate this by focusing on two areas central to the speaker’s research program: the use of sensory pathways as “deep brain stimulators” and the opportunities afforded to mental health by enhancing our relationships with the microbial world, focusing especially on how health disparities are reflected in disparities in exposure to health-enhancing microbes that track along socioeconomic lines. Finally, we demonstrate how new treatments for depression that are being developed from these embodied perspectives often harken back to ancient practices that have been widely practiced across numerous cultures around the world.

About Dr. Raison: Charles Raison, MD, is the Mary Sue and Mike Shannon Chair for Healthy Minds, Children & Families and Professor, School of Human Ecology, and Professor, Department of Psychiatry, School of Medicine and Public Health, University of Wisconsin—Madison in Madison, WI. Prior to this he was Professor in the Department of Psychiatry, College of Medicine, and the Barry

Thursday
and Janet Lang Professor of Integrative Mental Health at the Norton School of Family and Consumer Sciences, College of Agriculture and Life Sciences, University of Arizona. In addition to his academic positions, Dr. Raison serves as the founding Director of the Center for Compassion Studies in the College of Social and Behavioral Sciences at the University of Arizona and the mental health expert for CNN.com. Dr. Raison is internationally recognized for his studies examining novel mechanisms involved in the development and treatment of major depression and other stress-related emotional and physical conditions, as well as for his work examining the physical and behavioral effects of compassion training.

Time: 7:45pm to 9:30pm  
Welcome Reception in Exhibit Hall  
Guggenheim Ballroom  
We are glad you are in Chicago with us! Join us for networking, hors d’oeuvres, cash bar and networking in the Exhibit Hall

Friday, March 17

Time: 7:00am-8:00am  
Room: Guggenheim Ballroom  
Continental Breakfast in Expo Hall

Time: 7:00am-7:00pm  
Room: Guggenheim Ballroom  
Exhibits Open

Time: 7:00am-7:00pm  
Room: Grand Foyer  
Registration

Time: 7:00am - 8:00am  
Room: Prado 1  
Springer Breakfast Meeting - Editorial Board  
(BY INVITATION ONLY)

CONCURRENT and GENERAL SESSIONS

Time: 8:00am-9:00am  
Room: Louvre 1  
BOS01: Buddhism and Neuroscience: A Conversation with the Dalai Lama  
Presenter: Hanno Kirk, LICSW, PhD  
Level: Intermediate  
Track: Basic Science (All Levels) / Hot Topics  
Target Audience: Clinicians and researchers  
CE Credits: 1
BOS02: Building Resiliency and Reducing Burnout in Healthcare Workers

Presenter: Angele McGrady, PhD, LPCC

Level: Intermediate

Track: Clinical Interventions and Optimal Performance

Target Audience: Psychologists, physicians, counselors, students

CE Credits: 1

BOS03: Effectiveness of HRV-Biofeedback and Mindfulness Based Intervention – A RCT

Presenter: Jan Vagedes, MA

Level: Intermediate

Track: Hot Topics

Target Audience: Psychologists, Medical Doctors, Biofeedback-Trainers

CE Credits: 1

BOS04: Brain Activation Imaging Using sLORETA Analysis of Photic, Auditory and pEMF Stimulation

Presenters: Thomas Collura, PhD, MSMHC, QEEG-D, BCN, NCC, LPCC; Bill Mrklas, LMT

Level: Intermediate

Track: Clinical Interventions and Optimal Performance

Target Audience: Clinicians and Researchers interested in understanding how QEEG brain dynamical analysis can be applied to understand individual brain responses to repetitive stimuli.

CE Credits: 1

BOS05: Using the qEEG to Distinguish Concussion from Non-concussion Injuries in Jr A Hockey Players Part 1

Presenter: Stuart Donaldson, PhD

Level: Intermediate

Track: Hot Topics

Target Audience: Any one interested in concussions and sports.

CE Credits: 1

BOS06: Infraslow Neurofeedback for Trauma: Targeting Autonomic Dysregulation

Presenters: Mark Llewellyn Smith; Ray McGarty, MA

Level: Introductory

Track: Hot Topics
Target Audience: All clinicians and researchers interested in treating developmental trauma and PTSD. We will use a co-morbid substance abusing population to describe the application of Infraslow Neurofeedback but the workshop will have a wide application for all traumatized patients.

CE Credits: 1

KEYNOTE ADDRESS
Time: 9:15am-10:30am
Room: Louvre 3
KEY02: The Brain Warrior’s Way
Presenters: Daniel Amen, MD, Board Certified, American Board of Psychiatry and Neurology, General Psychiatry
Level: Introductory
Track: Basic Science
Target Audience: All
CE Credits: 1

The Brain Warrior’s Way is a unique and powerful program and the only one of its kind to improve the health of your brain and body. In this course, Daniel G. Amen MD, teaches you how to develop the Brain Warrior’s M.A.S.T.E.R.Y. over your physical and mental health. The Brain Warrior’s Way is a way of living, a clear path developed over three decades of helping over tens of thousands of patients improve their energy, focus, mood, memory, weight, relationships, work and overall health.

About Dr. Amen: Dr. Amen is a physician, double board certified psychiatrist and ten-time New York Times bestselling author. He is the Founder and CEO of Amen Clinics in Costa Mesa and San Francisco, California, Bellevue, Washington, Reston, Virginia, Atlanta, Georgia and New York City. Amen Clinics have the world’s largest database of functional brain scans relating to behavior, totaling nearly 100,000 scans on patients from 111 countries. Dr. Amen is a Distinguished Fellow of the American Psychiatric Association, the highest award they give members, and is the lead researcher on the world’s largest brain imaging and rehabilitation study on professional football players. His research has not only demonstrated high levels of brain damage in players, he also showed the possibility of significant recovery for many with the principles that underlie his work. Together with Pastor Rick Warren and Dr. Mark Hyman, Dr. Amen is also one of the chief architects on Saddleback Church’s “The Daniel Plan,” a 52-week program to get people healthy through their religious organizations.

Time: 10:30am to 11:00am
Room: Guggenheim Ballroom
Break (Refreshments)

Time: 11:00am-12:30pm
Room: Louvre 1
BOS07: The EEG/qEEG Signature of Diffuse Axonal TBI and its Remediation with Audio-visual Entrainment
Presenter: Dave Siever, CET
Level: Intermediate
Track: Basic Science, Clinical Interventions and Optimal Performance, Hot Topics
Target Audience: This course is best suited for those with a significant understanding of brain physiology including EEG and have an interest in the treatment of brain injuries.
CE Credits: 1.5

Time: 11:00am-12:30pm
Room: Gallery 424
BOS08: Agenesis of the Corpus Callosum: Treatment using LORETA Neurofeedback Combined with Biofeedback
Presenters: Michael Thompson, BSc, MD, DPsych, CRPC©; Lynda Thompson, PhD, CPsych, BCN;
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
CE Credits: 1.5

Time: 11:00am-12:30pm
Room: Louvre 3
BOS09: Group Biofeedback: Standardizing Treatment, Utilizing Social Support and Motivational Interviewing
Presenters: Lamees Khorshid, PsyD; Carolyn Fisher, PhD
Level: Intermediate
Track: Clinical Interventions and Optimal Performance, Hot Topics
Target Audience: Providers interested in manualized treatment, group biofeedback or application of Motivational interviewing and biofeedback.
CE Credits: 1.5

Time: 11:00am-12:30pm
Room: Teylers
BOS10: Meta-Analytic Review of Mind-Body Interventions
Presenters: Paul Lehrer, PhD; Richard Gevirtz, PhD; Karenjot Kaur, BA
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Anyone using mind-body approaches
CE Credits: 1.5

Time: 11:00am-12:30pm
Room: Louvre 2
BOS11: Use of Tools from Positive Psychology, Mindfulness and Compassion to Address Challenges in Biofeedback Training
Presenters: Inna Khabaz, PhD, BCB; Urszula Klich, PhD, BCB
Level: Intermediate
Track: Clinical Interventions and Optimal Performance, Hot Topics
Target Audience: Any biofeedback practitioner interested in learning tools to overcome challenges in biofeedback training
CE Credits: 1.5
Time: 11:00am-12:00pm
Room: Gallery 524
EXD1: Neurofield Demonstration
CE Credits: 0

Time: 11:00am-12:00pm
Room: Gallery 624
EXD2: Help Your Clients Help Themselves with eVu-TPS presented by Thought Technology - Thought Technology is excited to announce the release of its newest sensor for use with smartphones and tablets: the eVu-TPS. Join this demo session to learn more about this amazing new heart rate variability, skin conductance and temperature-monitoring product for mobile and home-training with clients. This demo will feature a walk-through of using the sensor in combination with its companion app, the eVu Senz, for psychophysiological training.
Presenter: Raymond Yust
CE Credits: 0

Time: 12:30pm-2:00pm
Room: On Your Own
Lunch Break

GENERAL SESSION

KEYNOTE/Lunch & Learn
***Sandwiches available for purchase
Time: 12:45pm-1:45pm
Room: Louvre 3
KEY03: Heart Rate Variability: Bridging the gap between Physical and Mental Performance Coaches
Presenter: Chris Morris, PhD
Level: Intermediate
Track: Hot Topics
Target Audience: Mental and Physical Preparation Coaches, Fitness Enthusiasts
CE Credits: 1

The use of heart rate variability has witnessed a sharp increase in the world of elite athletics over the past several years. Members of both the strength and conditioning and mental performance communities use HRV to increase performance. However, their interpretation and utilization differ significantly. This session highlights the use of heart rate variability in collegiate athletics and its application to the identification of athletes functional state. This functional state represents how adaptable an athlete may be to a training load on a given day and serves to identify athletes who fail to adapt over a series of training sessions. The same mechanisms that drive the theories behind its use in physical performance also play a major role in mental performance. This session will attempt to bridge the gap between physical and mental coaches who work in tandem for one overarching purpose, to increase performance. These ideas should not be viewed as competing, yet
complimentary towards developing the athlete both physically and mentally.

Dr. Morris joined the University of Kentucky Athletics Department as the Director of Performance Science in August of 2016, coming from the University of Texas where he held a similar position. He is responsible for the strategic direction and coordination of a multi-disciplinary sports science program utilizing a variety of methods and technologies to enhance athletic performance while mitigating the risks of injuries. His research specializes in monitoring the internal loads of athletes in response to training using metrics such as heart rate variability, the direct current potential of brain waves, session ratings of perceived exertion, and wellness questionnaires. He is considered one of the leading authorities on athlete monitoring by Omegawave Inc. and has authored “Omegawave: Theory & Practice,” a manual to educate strength and conditioning professionals on the interpretation of Omegawave parameters and subsequent training prescription. He is married to Dr. Lauren Morris who is currently finishing her Orthodontic Residency at the University of Louisville.

Time: 2:00pm-2:30pm
Room: Gallery 624
BCIACERT: BCIA Certification 101
Presenters: Judy Crawford, Executive Director, Biofeedback Certification International Alliance (BCIA)
Target Audience: If you have ever wondered about becoming a BCIA certified practitioner in Biofeedback, Neurofeedback, or Pelvic Muscle Dysfunction Biofeedback, this informal discussion will lead you through the process and requirements and answer any questions you may have.
CE Credits: 0

Time: 2:35pm-3:05pm
Room: Gallery 624
BCIARECERT: BCIA Recertification 101
Presenters: Judy Crawford, Executive Director, Biofeedback Certification International Alliance
Target Audience: Those considering recertification will be led through an informal discussion on the process and requirements.
CE Credits: 0

Time: 2:00pm-3:30pm
Room: Louvre 1
BOS12: Biofeedback and Stress Management in the Treatment of Chronic Disease
Presenters: Christine Moravec, PhD; Angele McGrady, PhD, LPCC; Lamees Khorsbid, PsyD, BCB, BCN
Level: Intermediate
Track: Hot Topics
Target Audience: Biofeedback practitioners, mental health professionals, nurses, allied health professionals, researchers.
CE Credits: 1.5
BOS13: Improve health and performance with tactile and posture feedback training: the Alexander technique and posture feedback
Presenters: Erik Peper, PhD; Daria Okugawa
Level: Introductory
Track: Hot Topics
Target Audience: Clinicians and educators
CE Credits: 1.5

BOS14: Documenting the Nature and Extent of Concussions in a Jr. A Hockey Team Using qEEG Part 2
Presenters: Stuart Donaldson, PhD; Kayla Kaluzny, BS
Level: Intermediate
Track: Hot Topics
Target Audience: This presentation is geared towards the therapist who has experience in EEG biofeedback and sports.
CE Credits: 1.5

BOS15: Adding Neurotherapy to Your Practice: Basic Neurotherapy, ClinicalQ and Braindriving
Presenter: Paul Swingle, PhD, R Psych
Level: Introductory
Track: Clinical Interventions and Optimal Performance
Target Audience: Licensed health care providers
CE Credits: 1.5

BOS16: Integrative Treatment of Chronic Sensitized Pain with Autonomic Self-Regulation
Presenters: JP (Jack) Ginsberg, Licensed Clinical Psychologist/Neuropsychologist and Principal Investigator; Petra (Petie) Harvey-Glenesk, Doctoral student, Clinical Psychology, Professional School of Psychology, Licensed Psychological Assistant (CA) and Professional Life Coach
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Everyone interested in pain management, HRV, Mindfulness
CE Credits: 1.5

BOS17: Comprehensive Biofeedback-based Intervention for Pediatric Headache: Introduction and Pilot Study
Presenters: Katie Fleischman, PhD; Inna Khazan, PhD, BCB
Level: Introductory
Track: Basic Science
Target Audience: biofeedback clinicians working with children and adolescents, and those interested in learning more about comprehensive treatment of pediatric headache

CE Credits: 1.5

Time: 3:30pm-4:00pm
Room: Guggenheim Ballroom
Break (Refreshments)

Time: 4:00pm-5:00pm
Room: Louvre 1
BOS18: Elite Athletes; Neurofeedback, Biofeedback and Sleep
Presenter: Shona Halson, PhD
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Athletes and those who work with them such as trainers, coaches and psychologists.

CE Credits: 1

Time: 4:00pm-5:00pm
Room: Gallery 624
BOS19: Patterns of Performance – QEEG Findings During the Corvette “Reverse Test Drive”
Presenters: Tom Collura, PhD; Bill Mrklas, LMT
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Clinicians and Researchers interested in understanding how QEEG brain dynamical analysis can be applied to understand individual responses in a high-performance task and environment.

CE Credits: 1

Time: 4:00pm-5:00pm
Room: Louvre 2
BOS20: Naturopathic Medicine 101 - Introduction to Theory and Practice
Presenters: Brad Lichtenstein, ND BCB; Cindi Lee Hope, ND, BCB
Level: Introductory
Track: Hot Topics
Target Audience: All clinical providers

CE Credits: 1

Time: 4:00pm-5:00pm
Room: Louvre 3
BOS21: Integrating Neurofeedback and Sensory Grounding Techniques to Treat Complex Trauma
Presenter: Penjijean Gracefire, LMHC, BCN
Level: Introductory
Track: Hot Topics
Target Audience: Clinicians interested in learning how to better assess neurophysiological variables in complex
trauma cases using qEEG, and then how to integrate surface or sLORETA z-score neurofeedback with sensory grounding techniques.

**CE Credits:** 1

**Time:** 4:00pm-5:30pm  
**Room:** Gallery 424  
**BOS40: Collaborative Research, Former NFL players and Neurofeedback Innovations for Concussions**  
**Presenters:** Michael Linden, PhD; George Rozelle, PhD, QEEGD, BCN, Senior Fellow; Joe DeLamielleure; Gerri DeLamielluere; Eileen Roberts, PhD; Seth Conger, BA  
**Level:** Intermediate  
**Track:** Basic Science  
**Target Audience:** Psychologists, Physicians, Neurologists, Neurofeedback Therapists, Athletic Trainers, Athletes, Coaches  
**CE Credits:** 1.5

**Time:** 4:00pm - 7:00pm  
**Room:** Gallery 524  
**BCIAEX: BCIA Certification Exam**

**Time:** 5:05pm-6:05pm  
**Room:** Louvre 3  
**BOS23: Thalamocoherence: Modeling for Pain, Depression, Tinnitus and Depression**  
**Presenters:** Jay Gunkelman, QEEG–Diplomate; Gabe Sella, MD, MPH, MSc, PhD (HC), SFBCIA, FAAFP, FACPM, DAAAPM  
**Level:** Intermediate  
**Track:** Basic Science (All Levels)  
**Target Audience:** Any professional involved in neuroscience based evaluations or treatments.  
**CE Credits:** 1

**Time:** 5:05pm-6:05pm  
**Room:** Louvre 1  
**BOS24: Heart Rate Variability, Respiratory Sinus Arrhythmia and Biofeedback in LVADs Patients – A Feasibility Pilot Study**  
**Presenter:** Jan Vagedes, MA  
**Level:** Intermediate  
**Track:** Clinical Interventions and Optimal Performance  
**Target Audience:** Psychologists, Medical Doctors, Biofeedback-Trainers  
**CE Credits:** 1

**Time:** 5:05pm-6:05pm  
**Room:** Louvre 2  
**BOS25: Historical Links Between Biofeedback and Psychoneuroimmunology**  
**Presenter:** Rick Harvey, PhD  
**Level:** Introductory  
**Track:** Basic Science (All Levels)
Target Audience: Basic, all levels
CE Credits: 1

Time: 5:05pm-6:05pm
Room: Gallery 624
BOS26: Verbal Memory Recovery
Presenter: James Seberger, MD
Level: Intermediate
Track: Basic Science
CE Credits: 1

Time: 5:05pm-6:15pm
Room: Teylers
AAPB Council of Chapters Meeting

GENERAL SESSION

KEYNOTE PRESENTATION: PRESIDENT’S LECTURE
Time: 6:15-7:30pm
Room: Louvre Ballroom
KEY04: Developmental Trauma: Effects of Abuse & Neglect on CNS Development & a Possible Role for Neurofeedback to Reverse the damage
Presenter: Bessel van der Kolk, MD
Level: All
Track: Hot Topics
Target Audience: All
CE Credits: 1

Trauma directly affects the developing brain, and specific brain functions responsible for attention, concentration, regulating emotions and engaging in satisfying relationships. This keynote will discuss some of the well-established changes. We are currently studying whether neurofeedback can reverse those brain changes. Many traumatized children and adults continue to feel chronically on edge, scared, agitated, collapsed and helpless, even after exposure treatment and medications. To deal with this they often try to cope with alcohol or drugs. Medications that may make life more manageable but they also affect motivation and curiosity, and rarely really lead to increased focus, relaxation and engagement. This lecture reviews the way trauma impacts on brain development and show the effects of neurofeedback.

About Dr. van der Kolk: Bessel A. van der Kolk, MD has been active as a clinician, researcher and teacher in the area of posttraumatic stress and related phenomena since the 1970s. His work integrates developmental, biological, psychodynamic and interpersonal aspects of the impact of trauma and its treatment. His book Psychological Trauma was the first integrative text on the subject, painting the far-ranging impact of trauma on the entire person and the range of therapeutic issues which need to be addressed for recovery. Dr. van der Kolk and his various collaborators have published extensively on the impact of trauma on development, such as dissociative problems, borderline...
personality and self-mutilation, cognitive development in traumatized children and adults, and the psychobiology of trauma. He was co-principal investigator of the DSM IV Field Trials for Post-Traumatic Stress Disorder. His current research is on how trauma affects memory processes and brain imaging studies of PTSD.

Time: 7:30pm-9:00pm
Room: Guggenheim Ballroom
Presidential & Poster Reception
Join us for a networking reception and take advantage of the informal interactive process between an author and a host of viewers allows for meaning dialogue about the SCIENCE!

Time: 9:00pm-11:50pm
Room: See Invitation in Registration Packet/or Check with Paula at the registration counter
STUDENT PARTY – Invitation Only – All students welcome!

Saturday, March 18

Time: 7:00am-8:00am
Room: Guggenheim Ballroom
Continental Breakfast in Expo Hall

Time: 7:00am-2:00pm
Room: Guggenheim Ballroom
Exhibits Open

Time: 7:00am-6:30pm
Room: Grand Foyer
Registration

Time: 8:00am-9:00am
Room: Louvre 1
BOS27: Multi-Cultural and Diversity Considerations for Organizations and Practitioners
Presenter: Rick Harvey, PhD
Level: Introductory
Track: Basic Science
Target Audience: Basic, all levels
CE Credits: 1

Time: 8:00am-9:00am
Room: Louvre 2
BOS28: Implementation of Neurofeedback into a Primary Care Setting
Presenter: Lisa Black, PsyD
Level: Introductory
Track: Hot Topics
Target Audience: Multiple backgrounds are appropriate. Any individual interested in understanding the barriers and facilitators of implementing neurofeedback into a primary care clinic and how to improve sustainability.
CE Credits: 1
ORAL01: Oral Presentations - HRV Abstracts Plus Q&A

Presenters: Fredric Shaffer, PhD, BCB; Zachary M. Meehan, Undergraduate; Steven Shearman

Level: Introductory

Track: Basic Science, Hot Topics

Target Audience: Professionals who use heart rate variability in clinical or optimal performance practice, or research.

CE Credits: 1

Time: 8:00am-9:00am

Room: Louvre 3

BOS29: Comparing the Effectiveness of HRV Biofeedback and Exercise in Stress Reduction

Presenters: Andrea DeBarros, BA, BS; Patrick Steffen, PhD

Level: Intermediate

Track: Clinical Interventions and Optimal Performance

Target Audience: Individuals with clinical and research backgrounds who are interested in learning about the clinical implications of HRV biofeedback as a mode of stress reduction.

CE Credits: 1

Time: 8:00am-9:00am

Room: Teylers

KEY06: Science and Clinical Application of Instantaneous Z-Score Neurofeedback

Presenters: Thomas Collura, PhD; Robert Thatcher, PhD

Level: Intermediate

Track: Clinical Interventions and Optimal Performance

Target Audience:

CE Credits: 1

The objectives are to explain and present the history, science and clinical applications of Instantaneous Z-Score Neurofeedback (NFB). The two presenters will split time and present their different histories and different approaches to instantaneous Z-score NFB. The topics will include the technical underpinnings of the computation of instantaneous z-scores using a reference database and clinical evidence that the proposed mechanism are supported by electrophysiological and outcome data. Special emphasis will be placed on scientific standards of instantaneous Z-scores and comparisons to standard raw Z-score NFB will be discussed. Both presenters will provide demonstrations of different methods of implementing Z-score NFB.

GENERAL SESSION
ABOUT DR. COLLURA and DR. THATACHER: Thomas F. Collura, PhD, MSMHC, QEEG-D, BCN, NCC, LPCC is Clinical Director at the Brain Enrichment Center. He earned his doctorate from Case Western Reserve University in Biomedical Engineering with a concentration in Neuroscience, and also has undergraduate degrees from Brown University in Philosophy and Biology. He has been on the staff of the Department of Neurology, Cleveland Clinic, as a neurological computing scientist and clinical instructor in neurophysiology, and has been an Adjunct Assistant Professor at Case Western Reserve University School of Medicine. He completed his Master's degree in Mental Health Counseling from Walden University and is a National Certified Counselor as well as board certified in Quantitative EEG and in Neurofeedback. He is the author of “Technical Foundations of Neurofeedback” published by Taylor/Francis. He is a President of the International Association for Applied Psychophysiology and Biofeedback (AAPB). He is a certified mentor with the Biofeedback Certification International Alliance (BCIA). Dr. Collura has published dozens of peer-reviewed journal articles, book chapters, and research reports. At the Brain Enrichment Center, he provides counseling and neurofeedback services, and directs clinical and basic research.

Dr. Robert Thatcher received a BS degree in Chemistry from the University of Oregon and a PhD in biopsychology from the University of Waterloo. From 1971–72, he was a NIH postdoctoral fellow in neurobiology and neurophysiology at the Albert Einstein College of Medicine before joining the faculties of New York Medical College and NYU School of Medicine. From 1979 to 1999, Dr. Thatcher was a professor of Psychiatry at the University of Maryland before joining the faculty of the National Institutes of Health as the program manager for the 1st 128 channel EEG system where he served on the National Institutes of Health Scientific Advisory Committee for the NIH Human Brain Map Project. From 1993 to 2001 Dr. Thatcher was the director of the NeuroImaging Laboratory at the Bay Pines VA Medical Center, Bay Pines, Florida, and was an adjunct professor in the Departments of Neurology and Radiology at the University of South Florida also the EEG and MRI principal investigator for the Department of Defense and Veterans Administration Head Injury Program (DVHIP). He served as Sargent of Arms on the board for ISNR in 1998–1999, in 1999 – 2001 he served on the board of the American Board of Electroencephalography and Neurophysiology (ABEN) and from 1999 to 2004 he served on the board as Secretary for the EEG and Clinical Neuroscience Society (ECNS). In 1998 he was awarded the “Life Time Achievement Award for Work in the Scientific Specialty of QEEG”, by the American Board of Certification of Quantitative Electroencephalography, in 2008 he was the recipient of the AAPB “Hans Berger Award of Merit” and in 2009 he was awarded the ISNR “Life Time Achievement Award”. In 2012 along with co-authors he received the Best Paper Award: “Differentiating transformational and non-transformational leaders on the basis of neurological imaging”. Published in The Leadership Quarterly, 2012. Sponsored by the Center for Creative Leadership. He is the inventor/developer of NeuroGuide software for QEEG and Neurofeedback and is the author of over 200 publications, including eight books. His most
recent books are the “Handbook of Quantitative Electroencephalography and EEG Biofeedback” and “Z Score Neurofeedback: Clinical Applications” (co-edited with Dr. Joel Lubar). He is currently the director of the Applied Neuroscience Research Institute and the President & CEO of Applied Neuroscience, Inc.

**Time:** 10:30am-11:00am  
**Room:** Guggenheim Ballroom  
**Networking Break / EXHIBITOR DRAWING**  
**Must be present to win!!**

**Time:** 11:00am-12:30pm  
**Room:** Louvre 1  
**BOS30: Clinical Biofeedback vs. Sport Science: Enhancing our team coordination of services when utilizing HRV biofeedback for assessment, monitoring, and training with Optimal Functioning domains.**  
**Presenters:** Richard Gevirtz, PhD; Chris Morris, PhD – Exercise Science; Donald Moss, PhD  
**Level:** Intermediate-Advanced  
**Track:** Hot Topics  
**Target Audience:** Optimal Functioning; Mental Performance, Sport Psychology, Exercise Physiologists, Strength & Conditioning, Sports Medicine  
**CE Credits:** 1.5

**Time:** 11:00am-12:30pm  
**Room:** Louvre 2  
**BOS31: Stress Update: Connecting the Dots**  
**Presenter:** Jan Newman, AAS, BS, MD, MA  
**Level:** All  
**Track:** Basic Science, Clinical Interventions and Optimal Performance, Hot Topics  
**Target Audience:** Suitable for all levels  
**CE Credits:** 1.5

**Time:** 11:00am-12:30pm  
**Room:** Louvre 3  
**BOS32: Unusual Migraine Presentations that Mimic Other Psychological and Neurological Diagnoses**  
**Presenter:** Jeffrey Carmen, PhD  
**Level:** Advanced  
**Track:** Clinical Interventions and Optimal Performance  
**Target Audience:** Clinicians or those who suffer from migraines.  
**CE Credits:** 1.5

**Time:** 11:00am-12:30pm  
**Room:** Teylers  
**BOS33: Biofeedback in Pediatric Pain: Three Models of Care**  
**Presenters:** Ethan Benore, PhD; Tyson Sawchuk, PhD; Angela Fletcher  
**Level:** Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Clinicians Clinical researchers
CE Credits: 1.5

Time: 12:30pm-2:00pm
Room: On Your Own
Lunch Break

Time: 12:45pm-1:45pm
Room: Field
Student Roundtable & Lunch

Time: 2:00pm -5:30pm
Room: Guggenheim Ballroom
Exhibits Teardown

Time: 2:00pm-3:30pm
Room: Louvre 1
BOS34: BCIA Ethics Presentation: Professional Ethics and Standards for Biofeedback and Neurofeedback: An Overview
Presenter: Donald Moss, PhD
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Practitioners at all levels
CE Credits: 1.5

Time: 2:00pm-3:30pm
Room: Louvre 2
BOS35: The Effectiveness of tACS and pEMF Stimulation on EEG Neurotherapy Performance
Presenter: Nicholas Dogris, PhD, BCN, QEEG-D
Level: Intermediate, Advanced
Track: Clinical Interventions and Optimal Performance, Hot Topics
Target Audience: Neurotherapy professionals who are interested in learning how to improve operant conditioning procedures and methodology in their clinical practice.
CE Credits: 1.5

Time: 2:00pm-3:30pm
Room: Louvre 3
BOS36: Update on Pelvic Floor Rehabilitation for Urinary Incontinence: covering anatomy and physiology of the urinary tract system
Presenters: Debbie Callif, BS; Gabe Sella, MD, MPH, MSc, Ph.D (HC), SFBCIA, FAAFP, FACPM, DAAAPM
Level: Introductory, Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Anyone interested in learning how biofeedback and behavioral treatment techniques can improve urinary incontinence and improve quality of life issues.
CE Credits: 1.5
Time: 2:00pm-3:30pm  
Room: Teylers  
BOS37: SPORTS PANEL  
Presenters: Shona Halson, PhD; Leah Lagos, PhD  
Level: Intermediate  
Track: Clinical Interventions and Optimal Performance  
CE Credits: 1.5

Time: 3:30pm-4:00pm  
Room: Preconference function area  
Break (Refreshments)

Time: 4:05pm -5:05pm  
Room: Louvre 1  
BOS38: The Mindfulness Imperative  
Presenter: Brad Lichtenstein, ND BCB  
Level: Introductory  
Track: Clinical Interventions and Optimal Performance  
Target Audience: Those interested in understanding the use of mindfulness as a therapeutic intervention as a foundation in biofeedback training  
CE Credits: 1

Time: 4:05pm -5:05pm  
Room: Louvre 2  
BOS39: Autonomic Balance and Executive Function  
Presenters: Tara Austin, Doctoral Student; Patrick Steffen, PhD  
Level: Introductory  
Track: Basic Science (All Levels)  
Target Audience: Those interested in learning about applying Heart Rate biofeedback to executive functioning and cognitive tasks, those who are interested in learning about different aspects of spectral analysis of HRV biofeedback and how this can influence research.  
CE Credits: 1

Time: 4:05pm -5:05pm  
Room: Louvre 3  
ORAL02: Oral Presentation - Emotional Well-being  
Presenters: Elisabetta Patron, PhD; Erik, Ceunen; PhD, BSc, MSc  
Level: Introductory - Intermediate  
Track: Clinical Interventions and Optimal Performance  
Target Audience: Students clinicians interested in the use of neurofeedback of alpha asymmetry  
CE Credits: 1

Time: 4:05pm -5:05pm  
Room: Teylers  
BOS41: Brain Brightening Part 2—Executive Function, Fluency, Memory, and PAF from AV Entrainment in Middle Aged and Elderly  
Presenter: Christine Palmquist, EdD, LMFT  
Level: Introductory
Track: Hot Topics
Target Audience: Any mental health providers seeking to increase cognitive functions in middle aged and elderly, especially those who are interested in treating either individually or a group of people at one time.
CE Credits: 1

GENERAL SESSION

KEYNOTE PRESENTATION:
DISTINGUISHED SCIENTIST LECTURE
Time: 5:15-6:30pm
Room: Louvre 3
KEY07: Is Neurofeedback of Slow Cortical Potentials in Children with ADHD Specific? A summary of Design and Results of the German Multicenter Study on SCP-Feedback
Presenter: Ute Strehl, MSc, PhD
Level: Intermediate
Track: Clinical Interventions and Optimal Performance
Target Audience: Clinicians and researcher interested in the evidence base of SCP-Feedback.
CE Credits: 1

Congratulations to Dr. Ute Strehl

Neurofeedback (NF) in children with ADHD has been investigated in a series of studies. Although most of the studies reported favorable outcomes, the question of specificity has not been answered unanimously. In a multicenter study including 144 children, efficacy of SCP feedback was compared with a semi-active electromyographic feedback (EMG), controlling for unspecific effects of treatment. Both groups were randomized and trained in an identical setting. The only difference referred to the target of self-regulation. As a primary outcome both groups showed reduced symptoms according to parents ratings. NF was superior over EMG (significant treatment difference, \( p=0.023 \)). The Effect size was \( d=0.57 \) without and 0.40 with Baseline observation carried forward (BOCF). Only NF showed successful self-regulation of EEG. Adverse events and serious adverse events were assessed based on the criteria for clinical studies. As a result, no severe side effects were observed. The very few adverse events observed remitted quickly and had no influence on the treatment schedule. It was concluded that based on both specific and unspecific effects SCP-FB is feasible and efficacious.

The AAPB Distinguished Scientist Award is presented annually “in recognition of an outstanding career.
and scientific contribution to the field of applied psychophysiology and biofeedback.” This award recognizes a scientist who has advanced Biofeedback through a significant body of research conducted, as judged by publications, awards and peer reviews, and has made a major impact upon the field of study, both nationally and/or internationally. Nominees must hold a doctoral degree in a psychology, biomedical science, medicine, or other health-related field. Recipients are selected based on the following evaluation criteria: scientific importance of research discoveries; mentorship of students, postdoctoral fellows, and new faculty; continued impact on the field.

ABOUT DR. STEHL: Ute Strehl, PhD, is a licensed clinical psychologist and Assistant Professor (Emeritus) at the Institute for Medical Psychology and Behavioral Neurobiology of the Eberhard-Karls University of Tübingen, Germany. Her research focuses on the development of behavioral treatments for neurological disorders such as Epilepsy, Parkinson’s Disease and Attention Deficit-Hyperactivity Disorder. She is the recipient of multiple awards for her teaching, research, and publications. In 2010 she was honored by the Biofeedback Foundation of Europe with the “Exceptional Achievement Award” for outstanding contribution to the EEG field through her research on Slow Cortical Potentials. Among other publications, she authored the “EEG-Primer” and “Biofeedback of Slow-Cortical Potentials” chapters in the newest edition of the well-known “Biofeedback: A Practitioner’s Guide,” edited by Schwartz & Andrasik.
CLOSING NIGHT RECEPTION – TICKETED EVENT
$40 per person
6:45pm – 8:00pm

AAPB requests the pleasure of your company at our closing night reception on Saturday, March 18, 2017. Join us after the conference for an informal gathering of your peers to debrief, distill and unwind.

A portion of the proceeds from each ticket sold will benefit the Foundation for Education and Research in Biofeedback and Related Sciences (FERB), which works to promote and support education, special papers and publications, scholarships, recognition awards and research in the area of applied psychophysiology.

**When:** Saturday, March 18, 2017 6:45pm 8:00pm - Cocktails and Hors d’oeuvres

**Where:** Hotel Loews Chicago O’Hare

**Cost:** $40 per person (Included light Hors d’oeuvres, coffee, dessert and one drink ticket. Cash bar available to follow.)
1. Posture Change Feedback Training and its Effect on Health
Shane Colombo, Student; Monica Joy, Student; Lauren Mason, Student; Erik Peper, PhD, BCB

2. Posture Matters
Lauren Mason, Student; Monica Joy, Student; Erik Peper, PhD, BCB; Richard Harvey, PhD; Annette Boosman, MSCT, BCB

3. Mood and Physiological Arousal in Chronic Pain Patients
Valerie Jackson, PhD; Heather Poupore-King, PhD PhD, BCB; Ravi Prasad PhD

4. The Effectiveness of Remote HRV Training in Reducing Symptoms of PTSD
Carmen Russoniello PhD, BCB, BCN, LPC, LRT; Lt. George T. Stegeman; Lieutenant Christina Brown-Bochicchio MS, LRT; Matt Fish PhD, LRT, BCB

5. Adherence to HRV biofeedback training compared to aerobic exercise.
Amy S. Welch PhD; Christal McCormack BS; Sierra Williams BS

6. Benefits of Synergistic Effects of Biofeedback Therapy/MindBody Medicine with Naturopathic Medicine in Treating Individuals with Stress, Anxiety, and/or PTSD
Cyndi Hope ND, BCB; Griffin McMath, Naturopathic Medical Student; Ryan Olson Naturopathic Medical Student; Darlene Lee Naturopathic Medical Student; Sarah Wright, Naturopathic Medical Student

7. The Effects of Meditation and Mindfulness on Telomere Length and Telomerase
Kristin Jamieson MA, MEd

8. Battlefield Acupuncture and Pain: A Heart Rate Variability Analysis
Allison Beachum BS in Exercise Physiology; Aaron Craven BS, LRT/CTRS; Carmen Russoniello PhD, LRT, LPC, BCB, BCN

Aaron Craven BS, LRT, CTRS; John Locke BS, LRT, CTRS; Carmen Russoniello PhD, LRT, LPC, BCB, BCN; Kyle Roebuck

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10. Simultaneous biofeedback training of pupil diameter and heart rate
Masahiro Sakai

11. The Effects of Menopause on Psychophysiology
Madeleine Coenen, Undergraduate student; Nicole Callister, Undergraduate student; Kent Fellows, Undergraduate Student; Amanda Koci B.S.; Sofia Vallesio, undergraduate student; Patrick Steffen, PhD

12. Should we tell our friends? Physiological arousal when disclosing romantic problems to the social network
Matthew T Fish PhD, LPCA, LRT, CTRS, BCB; Jakob F Jensen, PhD, LMFT, AAMFT Approved Supervisor; Meagan B Collins, BA; Braden Brown, MMFT

13. Social Anxiety and Effective Brief Meditation
Elizabeth Bigham, PhD Health Psychology

14. The Effectiveness of Heart Rate Variability Biofeedback Training in Reducing Symptoms of Migraine Headache: A Randomized, Controlled, Pilot Study
Emily Reames BS, CTRS; Carmen Russonello PhD, LRT/LPC, BCB, BCN

15. Additive Benefit of Biofeedback in Stress Management Training
Carolyn Fisher, PhD, BCB; Benjamin Greenberg, PhD, LP, BCB; Wendy Sweet, MS; Michael McKee, PhD, BCB; Christine Moravec, PhD

16. This Is Your Brain On Ballet: The QEEG of Ballet Dancers
Aharon D. Shulimson Ph.D., M.S.C.P.

Elena Labkovsky, PhD; J. Peter Rosenfeld, PhD

18. New protocol for insomnia treatment using neurofeedback: Beta decrease protocol
Jeongeun Jeon, Student; Sungwon Choi, Professor

19. The comparison of beta decrease protocols for insomnia patients
Yoon Soyoung; Choi Seungwon; Professor

20. Objective and Subjective Effects of Cognitive-Behavioral Therapy of Insomnia
Dajeong Kim, student; Sungwon Choi, Professor
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   Donna L. Schuman LCSW, BCB, BCN; Michael O. Killian PhD; Bryan Butler LPC, LCDC, BCN; Kristen M. Elliott LPC, BCN

22. LORETA Imaging of Alpha-Theta Protocol Training
   Jerry R. DeVore PhD, ABPP, BCB, BCN

23. Understanding Expectancies for Biofeedback Among Women Who Self-Injure
   Maureen M. Hallett M.A.; Alexa M. Carter B.A.; Colin J. Carey B.S.; Rosemary Gerardy B.A.; Jocelyn R. Rompogren, M.A.; Milton Z. Brown, PhD; Richard Gevirtz, PhD

24. Stress Suspension: A Biofeedback Stress Management Intervention for At-Risk Youth
   Matthew Fish PhD, LRT, CTRS, LPCA, BCB; Courtney Nall, BS; Kristina Cripes, BS

25. The activation principle in mind-body interventions, a preliminary map.
   Frank Suzzoni, MD

26. Effects of 12 and 18 sessions of rTMS on autonomic activity in autism spectrum disorder
   Guela Sokhadze MS, PhD candidate, graduate student; Manuel F Casanova M.D., Professor of Biomedical Sciences; Desmond Kelly MD, Vice-Chair of Academic Affairs Estate; M Sokhadze PhD, Professor, Dept. Biomedical Sciences
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27. Paradoxical Responding in an EEG Alpha Discrimination Task
   Jon Frederick PhD, BCN; Austin M. Guetter, Student

28. Neurofeedback training in high functioning children with autism
   Tato Sokhadze PhD, Research Professor; Desmond Kelly MD, Professor of Pediatrics; Manuel Casanova M.D., Endowed Chair in Neurotherapeutics; Allan Tasman M.D., Professor of Psychiatry
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29. The Effects of Heart Rate Variability Breathing Training on Maximal Isometric Strength: A Case Study
   Jacalyn McComb PhD, Fellow of ACSM; Cory Harty BS, MS student

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30. Timing of coping instruction presentation during acute stress
Lauren Kennedy, PhD candidate; Sarah Henrickson Parker, PhD

31. Electromyographic and Temperature Biofeedback among People with Chronic Tension and Migraine Headaches Who Failed Standard Treatment
Ghazala Nathu MS, MD, PhD, FACB

32. HRV Biofeedback with College Aged Musicians-Pilot Study
Tara Austin B.A., B.M., M.M.; Taylor Stoker B.A. in progress; Raymond Torres, B.S. in progress; Patrick Steffen, PhD, Clinical Psychology

33. A review comparing the efficacy and risks of methylphenidate and neurofeedback as treatments for children with Attention Deficit Hyperactivity Disorder (ADHD)
Desiree Azizoddin, MA; Jeffrey Murray, MA; Blake T Hilton, MA

34. Face familiarity processing: ERP source analysis study using the Bayesian Model Analysis Method
Ana Maria Castro Laguardia, B.S.; Agustin Lage Castellanos, MSc.; Ela I. Olivares, PhD; Jaime Iglesias-Dorado, PhD; Jhoanna Pérez Hidalgo-Gato, MSc.; Joanna Jaén Duany, B. S.; Pedro Valdés-Sosa, M.D., PhD; María Antonieta Bobes León, PhD.

35. VIRTUAL REALITY BONES™ and FELDENKRAIS® MOVEMENTS Compared to CORE STABILIZATION BIOFEEDBACK and MOTOR CONTROL EXERCISES: Comparative Effects on Chronic Non-Specific Low Back Pain in an Outpatient Clinical Setting
Timothy J. Sobie MS, PT, PhD Candidate

36. THE EFFICACY OF BIOFEEDBACK FOR EATING DISORDERS
Dixie Brown, MS, ICAADC, LCAS, CAP

37. iCare Health Monitor Phone App vs. Traditional Portable Pulse Oximetry
Elizabeth Bigham, PhD in Health Psychology

38. Validity of Vagal Withdrawal and Recovery from Serial 7s: Preliminary Findings
Mark J. Stern, MA, BCB, BCN; Elizabeth Bigham, PhD; Leighton A. Grampp, BS, BCB; Asia Soriano; Kelly McCarthy, BA; Sarah Khayat, MSc; Karina V. Gutman, M.A., BCB; Richard Gevirtz, PhD
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39. Cases of Thermographic Analysis of Recovery Following Athletic Activity
   Cindy Cheung, B.A.; Richard Harvey, PhD; Erik Peper, PhD; Connie Tseng

40.- Vagal Modulation Differentiates Performance on Verbal Fluency: Preliminary Findings
   Nicholas Stelmach, BA; Mark Stern MA, BCB, BCN; Kelly McCarthy BA; Meenakshi Patne, Undergraduate Student;
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41. The Efficacy of Integrating Heart Rate Variability Biofeedback with Psychotherapy for Clinicians and Clients New to Biofeedback in a University Counseling Center
   Barbara Morrell, PhD; Maureen Rice, PhD; Lisa Leavitt, PhD; Jessica Bawden

42. Effects of Diaphragmatic Breathing and Guided Imagery on HRV, IL-1B, & Mood in Women with Thyroid Disease
   Carolyn Trasko, LCSW, LADC

43. Chronic sympathetic activation in Tinnitus Sufferers
   Martyn Thomas

44. Tuning the Traumatized Brain: A Systematic Review of the Literature on Neurofeedback for PTSD
   Ashlie Bell, PhD(c), LWS, BCN

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