

# SYNTHESIS & COHERENCE: Integrating the Whole

37th  
Annual  
Meeting

April 6 – 9, 2006

Hilton Portland  
and Executive Tower

Portland, Oregon



# Program

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# Message from the Chair

Dear Colleagues:

On behalf of the 2006 Program Committee, it is my pleasure to introduce AAPB's 37th Annual Meeting in Portland, Oregon at the Hilton Portland and Executive Tower. The theme of this year's meeting is "Synthesis & Coherence: Integrating the Whole." The Program Committee, including Jerry DeVore, Ph.D., Aubrey Ewing, Ph.D., David Kaiser, Ph.D., Sharon Lewis, Ph.D., Gabriel Sella, M.D., Henry Weeks, Ph.D., AAPB President Richard Sherman, Ph.D., and I have worked diligently to create a memorable schedule of events. In doing so, we have incorporated ideas and suggestions from many of you and hope that we have succeeded in creating a program that will have something for everyone. Thank you for all of your input!



We are honored this year to welcome David Spiegel, M.D., from the Stanford University School of Medicine as our primary keynote. Dr. Spiegel is the author of eight books and 394 journal articles and book chapters on stress, trauma, dissociation, psycho-oncology, hypnosis, psychotherapy, and mind/body medicine. He will provide an energetic and stimulating start to our conference. Of course, you will also have the opportunity to hear informative presentations and participate in a variety of workshops that highlight the new and exciting events going on in Applied Psychophysiology, Biofeedback, and Neurofeedback.

Lastly, the Saturday night event will be a little bit different this year. After you've had the opportunity to personally explore some of the best that Portland has to offer, make your way back for a great collegial time. The "Biofeedback Bistro" will include hot desserts and cool jazz. In fact, you may find that you recognize some of the musicians as you soak up the atmosphere, listen to music, and spend some quality time with your friends, both old and new.

We look forward to seeing you in Portland and hope that you will mark your calendars to join us for the Annual Meeting!

Noland White, PhD

Chair, 2006 Annual Meeting Program Committee

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# Agenda

Tuesday, April 4, 2006

**6:30 am – 9:00 am** Registration for Workshop 1 only

**7:00 am – 6:30 pm** WS1 – Introduction to Biofeedback

*See descriptions on page 14*

Wednesday, April 5, 2006

**6:30 am – 7:00 pm** Registration

**7:00 am – 9:30 pm** Workshops

*See descriptions on pages 14 – 18*

Thursday, April 6, 2006

**7:00 am – 7:30 pm** Registration

**8:00 am – 5:00 pm** Workshops

*See descriptions on pages 18 – 20*

**5:30 pm – 6:30 pm** KEY1 – Keynote Address

David Spiegel, MD, Stanford University School of Medicine

## Mind Matters in Treating Illness

As modern medicine transforms many terminal diseases into chronic illnesses, providers are in greater need of effective techniques to give comfort, social support, and stress management skills for their patients. A substantial proportion of patients with both acute and chronic disorders also struggle with co-morbid conditions such as depression and anxiety. Dr. Spiegel will emphasize treatment approaches that can reduce distress, pain, and social isolation. He will describe psychotherapeutic techniques such as individual and group therapy, peer navigator programs, mindfulness training, and hypnosis. Dr. Spiegel will also discuss research about the physiological effects of these techniques, including the endocrine and immune system responses.

### Speaker

David Spiegel, M.D., is the Jack, Lulu & Sam Willson Professor in the School of Medicine and Associate Chair of the Department of Psychiatry and Behavioral Sciences at Stanford University School of Medicine in Stanford, California, where he is also Director of the Center on Stress and Health. In addition, he is Medical Director of the Stanford Center for Integrative Medicine at Stanford Medical Center. Dr. Spiegel is President of the American College of Psychiatrists and Past President of the Society for Clinical and Experimental Hypnosis.



**6:30 pm – 8:00 pm** Opening Reception

**7:00 pm – 8:00 pm** Performing Arts Section Meeting

**8:00 pm – 9:00 pm** Mind/Body Section Meeting  
Meet the Professor Q & A Session with Dr. David Spiegel

**8:00 pm – 9:00 pm** International Section Meeting

Friday, April 7, 2006

**6:30 am – 7:30 pm** Registration

**6:45 am – 8:15 am** Nurses Breakfast

**6:45 am – 8:15 am** Short Courses

*See descriptions on pages 22 – 23*

**SC1** – Breathing Beyond the Diaphragm: Anatomical Imagery and Feldenkrais  
Timothy Sobie, MS, PT, NW Mind Body Learning Institute, PLLC

**SC2** – Combined Modalities: HeartMath and the LENS (Neurofeedback)  
Stephen Larsen, PhD, BCIA, Stone Mountain Center

**SC3** – Progress in Neurofeedback for Autism  
Siegfried Othmer, PhD, The Brian Othmer Foundation

**SC4** – A Multi-Modal Treatment for Recurrent Abdominal Pain: Kaiser Permanente Protocol

**7:15 am – 8:15 am** Exhibitor Demonstrations

**8:30 am – 9:30 am** Opening Session

**9:30 am – 10:30 am** President's Address

**10:30 am – 7:00 pm** Exhibit Hall open

**10:30 am – 11:00 am** Break

**11:00 am – 12:00 pm** KEY2 – Keynote Address

Steven L. Wolf, PhD, PT, FAPTA, Emory University School of Medicine

## An Alternative Use of Surface EMG: Transcranial Magnetic Stimulation to Assess Cortical Representation of Upper Extremity Movement

This presentation defines transcranial magnetic stimulation (TMS) and discusses its uses (and misuses) in monitoring cortical plasticity. Inherent in this discussion are demonstrations of how lack of familiarity of fundamental surface electromyography may lead to

# Friday, April 7

questions regarding interpretation of fundamental findings using TMS to assess therapeutic interventions in neurorehabilitation.

## Speaker

Dr. Wolf has defined the selection criteria for the application of EMG biofeedback to successfully restore upper extremity function among chronic patients with stroke, via funding from NIDDR and NINDS. This series of studies spans 15 years and has resulted in over 80-refereed publications. Findings from this work paved the way to defining the minimal motor criteria for the application of forced use (constraint induced movement therapy) among chronic patients with stroke. At present, he is the Principal Investigator for the EXCITE (EXtremity Constraint Induced Therapy Evaluation) national, randomized clinical trial funded by the National Center for Medical Rehabilitation Research of NICHD and the National Institute of Neurological Disease and Stroke of the NIH.



floor centers in the United States. A biofeedback-assisted pelvic floor muscle exercise program that stabilizes the pelvic floor muscles can reduce and eliminate bladder and pelvic floor symptoms. Research is extensively detailing the efficacy of the use of biofeedback-assisted behavioral therapy for pelvic floor muscle training. This lecture will provide a comprehensive overview of the conservative management of urinary incontinence and related pelvic floor disorders with an emphasis on pelvic floor muscle rehabilitation. It will include present clinical application in practice and present the current evidence based research.

## Speaker

Diane K. Newman, RNC MSN, CRNP FAAN, a certified nurse practitioner, is Co-Director of the PENN Center for Continence and Pelvic Health, Division of Urology, University of Pennsylvania Medical Center, in Philadelphia. She has an appointment as an Instructor in the School of Medicine at the University of Pennsylvania. Ms. Newman received a Bachelor of Science degree in nursing from LaSalle University, and a Master of Science degree in nursing from the University of Pennsylvania, both in Philadelphia. She is certified as an adult nurse practitioner by the American Nurses Credentialing Center. She is a fellow of the American Academy of Nursing. Ms. Newman is an internationally known speaker on the topic of urinary incontinence and the use of devices and products for the management of incontinence.



12:00 pm – 1:00 pm

Lunch on your own

12:00 pm – 1:00 pm

“Meet the Editors”

Dr. Frank Andrasik, editor of *Applied Psychophysiology and Biofeedback*, and Dr. Donald Moss, editor of *Biofeedback*, invite you to visit with them and share your ideas on journal manuscripts and magazine articles. Bring your ideas.

12:00 pm – 1:00 pm

Student Round Tables

12:00 pm – 1:00 pm

Applied Respiratory Psychophysiology Section

12:00 pm – 1:00 pm

Education Division Meeting

12:00 pm – 1:00 pm

SEMG/SESNA Division Meeting

12:00 pm – 1:00 pm

Exhibitor Demonstrations

12:00 pm – 1:00 pm Neurofeedback Discussion Group

1:00 pm – 2:00 pm

INV1 – Invited Address

Diane Newman, RNC, MSN, CRNP, FAAN, University of Pennsylvania Medical Center

## State of the Science: Use of Biofeedback for Pelvic Floor Rehabilitation

Biofeedback therapy is used to evaluate and treat pelvic floor dysfunction and has become the standard medical care in pelvic

1:00 pm – 2:30 pm

SYM01 – Symposium

## Walking the Spiritual Path: Biofeedback and Health Implications

Moderator and Presenter: Jan Newman, MD, FACS, MA, University of Montana

Discussant: Paul Lehrer, PhD, UMDNJ – Robert Wood Johnson Medical School

Presenters: Erik Peper, PhD, San Francisco State University; Lobsang Raggay

1:00 pm – 2:30 pm

SYM02 – Symposium

## EEG Studies of Altered States: Hypnosis, Pain and Chocolate

Moderator: Larry Stevens, PhD, Northern Arizona University

Presenters: Sarah Wyckoff, MA, Northern Arizona University; Chris Pearson, Northern Arizona University; Stephanie Lowin, Northern Arizona University; Michael Greene, Northern Arizona University; Joyce Wu, Northern Arizona University

# Friday, April 7

**2:30 pm – 3:30 pm**

**SYM03 – Symposium**

## Autistic Spectrum Disorder: QEEG Subtypes and Neurofeedback Effects

Moderator and Discussant: Michael Linden, PhD, ADD Treatment Centers

Presenters: Robert Coben, PhD, Private Practice  
Lynda Thompson, PhD, ADD Centres, Ltd.

**2:30 pm – 3:30 pm**

**SYM04 – Symposium**

## Neurofunctional Responses to Weak Electromagnetic Fields

Moderator: Fraser W. Lawrie, MS

Discussant: Evelyn Soehner, MA, Acorn Health Associates

Presenters: Martha Lappin, Alternative Health Care Research, Inc.  
Mary Lee Esty, LCSW-C, PhD, Neurotherapy Center of Washington

## Oral Paper Session 1

**2:30 pm – 2:45 pm**

### Assessment and Treatment of Emotional Trauma

Paul G. Swingle, PhD, Private Practice

**2:45 pm – 3:00 pm**

### Heart Rate as a Predictor of Lineup Accuracy: An Exploratory Study

Justin S. Perry, University of Alaska, Anchorage

**3:00 pm – 3:15 pm**

### Use of Multiple-Site Performance Contingent Reward Programming

Jeffrey Eric Bolek, PhD, Cleveland Clinic Foundation

**3:15 pm – 3:30 pm**

### Combine Neurofeedback and Biofeedback for Stress Management Intervention

Lynda Thompson, PhD, ADD Centres Ltd.; Michael Thompson, MD, ADD Centres Ltd.

**3:30 pm – 4:00 pm**

**Break**

**4:00 pm – 5:00 pm**

**INV2 – Invited Address**

Jamie Pineda, PhD, University of California, San Diego

## Functional Significance of Mu Rhythm Oscillations

Frontal mu rhythm oscillations reflect sensorimotor processing in frontoparietal networks sensitive to cognitive and affective influences. Recent studies have linked mu rhythms to mirror neuron activity and the ability to imitate and understand others. I will review evidence suggesting that mu rhythms represent an important function linking perception and action.

### Speaker

Dr. Pineda is Associate Professor in the Departments of Cognitive Science and Neuroscience at the University of California, San Diego (UCSD). His research interests include the etiology of addiction, the role of monoamines in behavioral arousal and attention, and most recently the functional significance of EEG mu rhythms and mirror neurons.



**4:00 pm – 5:00 pm**

**SYM05 – Symposium**

## Hypnosis and Biofeedback in Pediatrics

Moderator and Presenter: Timothy Culbert, MD, Children's Hospitals and Clinics of Minnesota

Discussants: Gerard Banez, PhD, The Cleveland Clinic, Lynda Richtsmeieray

**5:00 pm – 7:00 pm**

**Reception/  
Cash Bar in Exhibit Hall**

**5:15 pm – 7:00 pm**

**Poster Session**

**6:00 pm – 7:00 pm**

**Chapters**

**7:00 pm – 8:00 pm**

**Allied Health  
Professional Section**

**7:00 pm – 10:00 pm**

**Neurofeedback  
Division Meeting**

# Saturday, April 8

6:30 am – 7:00 pm

Registration

10:00 am – 10:30 am

Break

7:30 am – 8:45 am

Past Presidents' Breakfast

10:00 am – 6:00 pm

Exhibit Hall Open

7:00 am – 8:30 am

Short Courses

10:30 am – 12:00 pm INV3 – Two Invited Addresses

See descriptions on page 23

**SC5** – Promoting Your Biofeedback Practice: Practically and Spiritually  
Susan Antelis, MPS, BCIA-C, Network Biofeedback Services, Inc.

**SC6** – An Overview of the LENS Approach  
Len Ochs, PhD, OchsLabs

**SC7** – Autonomic Dysfunction in Fibromyalgia: Physiology, Precipitating Causes and Interventions  
Gail Adler, MD, PhD, Harvard Medical School; Mary Lee Esty, LCSW-C, PhD, Neurotherapy Center of Washington; Norton L. Fisher, MD, FACP, CNS, Optimal Health Physicians.

7:30 am – 8:30 am

Exhibitor Demonstration

9:00 am – 10:00 am

KEY3 – Keynote Address

Gail Adler, MD, PhD, Brigham and Women's Hospital

## Neuroendocrine and Autonomic Nervous System Responses to Stress: Possible Relevance to the Pathophysiology of Fatigue Syndromes

Fatigue is a difficult to treat and common complaint with a prevalence of about 7% in the general population. About 1/3 of these individuals have idiopathic fatigue and may be classified as having fibromyalgia, chronic fatigue syndrome or related syndromes. It is hypothesized that these syndromes are due in part to changes in central nervous system function, which result in alterations in pain perception and disturbances in neuroendocrine and autonomic nervous system function that may contribute to the symptoms of these disorders. Severe stresses, such as prolonged hypoglycemia or exercise, acutely impair the neuroendocrine and autonomic responses to subsequent stresses. In patients with diabetes and hypoglycemia this is termed hypoglycemia associated autonomic failure. A model is proposed whereby acute and/or chronic stresses lead in some individuals to chronic alterations in neuroendocrine and autonomic function that then result in fatigue.

### Speaker

Dr. Adler specializes in Endocrinology, Diabetes and Hypertension. She received her medical education at the New York University School of Medicine in 1981. She is certified in Endocrinology and Metabolism along with Internal Medicine. Dr. Adler has been at the Brigham and Women's Hospital since 1987 where she conducted her fellowship.



## The Face-Heart Connection: Neural Mechanisms Mediating Social Behavior

The talk will focus on the Polyvagal Theory, which links the evolution of the autonomic nervous system to affective experience, emotional expression, facial gestures, vocal communication and contingent social behavior. The theory provides a plausible explanation of several features that are compromised during stress and observed in several psychiatric disorders.

### Speaker

Stephen W. Porges, PhD, is a Professor of Psychiatry in the Department of Psychiatry and Director of the Brain-Body Center, in the College of Medicine at the University of Illinois at Chicago. He is the former President of the Federation of Behavioral, Psychological and Social Sciences and the Society for Psychophysiological Research. Dr. Porges received his PhD in 1970 from Michigan State University and has been on the faculty of West Virginia University (1970-1972), the University of Illinois at Urbana-Champaign (1972-1985) and the University of Maryland at College Park (1985-2001).



C. Sue Carter, PhD, The Brain Body Center  
University of Illinois at Chicago

## How Behavior Affects the Brain: The Mediating Role of Neuropeptides

This talk will focus on the translational neurobiology of social behavior with emphasis on mechanisms underlying positive behaviors, including social bonds and parental behavior. Research in humans and other mammals, including socially monogamous prairie voles, has implicated neuropeptide hormones, including oxytocin and the related peptide vasopressin, in the brain development and the regulation of reactivity to positive and negative experiences. In the context of the neurochemical mediation of social behaviors, we gain a different perspective on human concepts such as isolation, social support and even "love".



# Saturday, April 8

## Speaker

Sue Carter, PhD is Professor of Psychiatry in the Department of Psychiatry and Co-Director of the Brain-Body Center, in the College of Medicine at the University of Illinois at Chicago. Dr. Carter received her PhD in 1969 from the University of Arkansas, followed by postdoctoral fellowships at Michigan State University and West Virginia University. Dr. Carter was a faculty member at the University of Illinois at Urbana-Champaign (1974-1985) and the University of Maryland at College Park (1985-2001), where she held the title of Distinguished University Professor. She is recent Past President of the International Behavioral Neuroscience Society.



**12:00 pm – 12:30 pm** **BCIA Certification 101**

**12:00 pm – 1:00 pm** **Exhibitor Demonstration**

**12:00 pm – 1:00 pm** **Optimal Functioning Section**

**12:00 pm – 1:00 pm** **Neurofeedback Discussion Group**

**12:30 pm – 1:00 pm** **BCIA Recertification 101**

**1:00 pm – 2:00 pm** **INV4 – Invited Speaker**

Mario Beauregard, PhD, Université de Montréal

## Brain Imaging Studies of the Effect of Neurofeedback Training in Individuals with AD/HD or Major Depression

This presentation will include the results of functional neuroimaging studies whose goal was to measure the impact of neurofeedback on the neural substrates of cognitive deficits in AD/HD children plus new data about the neural effects of neurofeedback training on major depression.

## Speaker

Mario Beauregard, PhD, is currently associate research professor at the Departments of Psychology and Radiology, and the Neuroscience Research Center, Université de Montréal. He is the author of more than 100 scientific publications in the fields of neuroscience, psychology, and psychiatry. He has recently edited and co-authored a book titled *Consciousness, Emotional Self-Regulation and the Brain* (2004).

**1:00 pm – 2:00 pm**

**SYM06 – Symposium**

## GI Issues: Teaming Naturopathy and Psychophysiology for Success

Moderator and Presenter: Kayle Sandberg-Lewis, LMT, MA, Private Practice and National College of Naturopathic Medicine

Presenter: Steven Sandberg-Lewis, ND, DHANP, National College of Naturopathic Medicine

**1:00 pm – 2:00 pm**

**SYM07 – Symposium**

## Stress Management and Neurovideofeedback for Performance Enhancement

Moderator and Presenter: Jonathan Cowan, PhD, Peak Achievement Training

Presenters: Steven Radlo, PhD, Western Illinois University

**1:00 pm – 3:00 pm**

**BCIA Mentoring Workshop**

**2:00 pm – 3:00 pm**

**SYM08 – Symposium**

## Multidisciplinary Consciousness Research: EEG, Personality and Ayahuasca

Moderator and Presenter: Katee Wynia, MA, Sonoma State University

Discussants: Frank Echenhofer, PhD, California Institute of Integral Studies, Dave Joffe, Lexicor Medical Technology

**2:00 pm – 3:00 pm**

**SYM09 – Symposium**

## Cerebral Connectivity

Moderator and Presenter: Robert Coben, PhD, Private Practice

Moderator: Marvin Sams, PhD, ND, Neurofeedback Centers of America

Discussant: Bill Hudspeth, PhD, Neuropsychometrix

**2:00 pm – 3:00 pm**

**SYM10 – Symposium**

## Provocative Question: Teach Self-Regulation in Multiple Settings

Moderator: George R. Rozelle, BCIA-EEG, Fellow, MindSpa Mental Fitness Center

Discussant: Ingrid Pirker-Binder, MMAG, Institut Bico, ASTI Association;

Presenters: Elizabeth Stroebel, PhD, Private Practice; Wesley Sime, PhD, University of Nebraska

**3:00 pm – 3:30 pm**

**Break**

# Saturday, April 8

**3:00 pm – 4:00 pm** **BCIA University Seminar**

**3:30 pm – 4:30 pm** **SYM11 – Symposium**

The Role of Audio-Visual Entrainment in Seniors' Issues

Moderator and Presenter: David Siever, CET, Mind Alive, Inc.

Presenters: Tom Budzynski, PhD, University of Washington; Donald Moss, PhD, Psychological Services Center

## Oral Paper Session 2

**3:30 pm – 3:50 pm – Citation Award**

sLORETA Correlates of Memory Impairment

Alicia Townsend, PhD, University of North Texas Health Science Center; Leslie Sherlin, MS, Capella University; Nova Tech EEG; Q-Metrx; James Hall

**3:50 pm – 4:10 pm**

Comodulation and Coherence in Normal and Clinical Populations

David Kaiser, PhD, Rochester Institute of Technology

**4:10 pm – 4:30 pm**

Effectively Analyzing Psychophysiological Measures

Michael Gendron, PhD, Central Connecticut State University; Carol Austad, PhD, Central Connecticut State University

**3:30 pm – 5:00 pm** **SYM12 – Symposium**

History of Biofeedback: A Conversation with the History Makers

Moderator and Presenter: Robert Kall, Futurehealth

A history of the field of biofeedback will be presented, with a focus on anecdotes and colorful stories that bring the history to life. Rob Kall will present this history with the help of a panel of people who were there, and who will help add life and details to the stories and stages of the history.

**4:00 pm – 5:00 pm** **BCIA Town Hall**

**4:30 pm – 6:00 pm** **Reception/Cash bar in Exhibit Hall**

## Oral Paper Session 3

**4:30 pm – 4:45 pm**

Standardized Low Resolution Electromagnetic Tomography of Alzheimer's

Leslie Sherlin, MS, Capella University, Nova Tech EEG, Alicia Townsend, PhD, University of North Texas Health Science Center; Q-Metrx, James Hall

**4:45 pm – 5:00 pm**

Detection of High Performance Abilities by HR Game-Like Biofeedback

Olga Jafarova, PhD, Biofeedback Computer Systems Lab; Mark Shtark, Institute Medical & Biological

**5:00 pm – 5:15 pm – Citation Award**

The Cousins Relaxation Exercise Increases

Andrew Bax, Truman State University; Joseph Goedde; William Robinson III

**5:15 pm – 5:30 pm – Citation Award**

Computer-Mediated Biofeedback in Managing Acute Post-Operative Pain

Jonathan Woodhouse, BA, George Fox University; Paul Lynch; Michale Dubois; Jae Park; Allen Leborgis, NYU Medical Center; Douglas Gentile

**6:00 pm – 9:00 pm**

**Claude Bernard Dinner (Invitation Only)**

**9:30 pm – 11:30 pm**  
**Biofeedback Bistro**

Come join your colleagues for hot drinks, tasty desserts and cool jazz. A cash bar will be available.



# Sunday, April 9

7:30 am – 2:00 pm

Registration

8:00 am – 9:00 am

## SP01 – Bringing Biofeedback into Managed Care

*continental breakfast with this session*

Faculty: Richard Gevirtz, PhD, Alliant International University; Rene Vega, MD, American Specialty Health

This is an open-ended symposium exploring the creation of affinity groups, managed care panels, preferred provider panels, and other vehicles for coverage of biofeedback services. Materials created by the presenters will be discussed in terms of minimal qualifications, standard of practice, etc.

9:00 am – 10:00 am

## SP02 – Research Scientist Award Presentation

Joel Lubar, PhD, Southeastern Biofeedback Institute

### The Status of Neurofeedback Past, Present and Future

Dr. Joel F. Lubar received his B.S. and Ph.D. from the Division of the Biological Sciences and the Department of Biopsychology at the University of Chicago. Dr. Lubar has published more than 100 papers, wrote many book chapters, and eight books in the area of neuroscience and applied psychophysiology. He has been a Regional Editor for the *Journal of Physiology and Behavior*, and an Associate Editor for *Biofeedback and Self Regulation*, Associate Editor for the *Journal of Neurotherapy*, and a member of the Editorial Board for the *Journal of Applied Psychophysiology and Biofeedback*. Dr. Lubar was responsible for developing the application of EEG biofeedback (neurofeedback) as a treatment modality for children, adolescents, and adults with attention deficit hyperactivity disorder. This endeavor began with controlled double blind cross over studies in the mid 1970's.



10:15 am – 11:15 am

KEY4 – Keynote Address

Robert Stern, PhD, Pennsylvania State University

### Biofeedback of Stomach Activity for The Treatment of Nausea

During the session, you will learn about the development of electrogastrogram (EGG) as a valid measure of stomach activity. The discussion will also center around the two specific patterns of EGG activity that indicate healthy stomach vs. nausea. Participants will hear a description of the most recent study, which demonstrates that with biofeedback of EGG, subjects could increase their healthy pattern of EGG.

#### Speaker

In the 1960s Dr. Stern was involved in studies of control of both heart rate and skin conductance with enhanced feedback. During the 1970s, Dr. Stern wrote *Biofeedback*. Since then he has been developing a noninvasive measure of stomach activity, the electrogastrogram, and studying the causes and prevention of nausea.



11:15 am – 11:45 am

A Vision for AAPB's Future

Richard Gevirtz, PhD, Alliant International University, 2006 President, AAPB

11:45 am – 1:00 pm

Lunch on your own

11:45 am – 1:00 pm

Neurofeedback Discussion Group

1:00 pm – 5:00 pm

Workshops

*See descriptions on pages 20 – 21*

## Speaker Information

Views and opinions expressed by speakers or others who have provided materials to and for this meeting are not necessarily those of AAPB. AAPB assumes no responsibility for nor endorses any of the comments, recommendations or materials that are provided.

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Some of the products exhibited here may not be effective for the suggested applications.

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An FDA declaration of safe and effective use may not apply to uses being promoted here. Please check with each vendor to ascertain FDA status of any device you are considering.

AAPB makes no endorsement, either stated or implied, regarding the products.

# Poster Presentations

The poster presentation is an opportunity for authors to present their research in a visual format. The authors will be present to discuss their work on Friday, April 7, 5:15 pm – 7:00 pm.

## **1. Vital Role of Psychophysiological Impact in Chronic Pelvic Pain**

Andrea Joan Rapkin, MD, UCLA; John S McDonald, MD, UCLA

## **2. The Effect of Neurofeedback on Performance Anxiety in Dancers**

Kenedy Singer, PhD(c), Santa Barbara Graduate Institute

## **3. Heart Rate Variability Biofeedback: Mood State Changes in Treating MDD**

Erin Arnold, Dartmouth College; Maria Karavidas, Psy.D., UMDNJ – Robert Wood Johnson Medical School; Igor Malinovsky, Rutgers University; Paul Lehrer, PhD, UMDNJ – Robert Wood Johnson Medical School

## **4. Effects of Neurofeedback Training on Post Traumatic Stress Syndrome**

Deborah Turvey, PhD(c), University of Natural Medicine; Richard Sherman, PhD, Behavioral Medicine Research & Foundation; Gerald Kozlowski, PhD

## **5. Delivery of E-Psychology Services to Women with Fibromyalgia**

Catherine Cutcher, PhD, Phoenix Educational Media, LLC/Regent University

## **6. Effects of Neurofeedback on Behaviors of Children with ADHD**

Jeongil Kim, PhD, Lotus Flowers Children Center

## **7. Effects of Neurofeedback on Performance of Children with LD**

Jeongil Kim, PhD, Lotus Flowers Children Center

## **8. Biofeedback Increases Heart Rate Variability in Heart Failure?**

Kim Swanson, MS, Alliant International University and Loma Linda University; Richard Gevirtz, PhD, Alliant International University; Milton Brown; James Spira, Naval Medical Center

## **9. Patient Conversation Raises Blood Pressure and Heart Rate**

Bryan Sappington, Truman State University; Robert Pacanowski; John Whipple III

## **10. EEG Correlates of LEMs During Verbal and Nonverbal Tasks**

Christina Mule, Rochester Institute of Technology; David A. Kaiser, PhD, Rochester Institute of Technology

## **11. Resonant Properties of the Body's Functional Systems and Biofeedback**

Evgeny Vaschillo, PhD, Rutgers University; Marsha Bates; Paul Lehrer, PhD, UMDNJ – Robert Wood Johnson Medical School; Robert Pandina

## **12. Effects of Heart Rate Variability Feedback in Reducing Blood Pressure**

Anke Reineke, MS, Alliant International University; Richard Gevirtz, PhD, Alliant International University; Lutz Mussgay; Joel Dimsdale; Paul Lehrer, PhD, UMDNJ – Robert Wood Johnson Medical School

## **13. Neurotherapeutic Assessment and Training of an Autistic Individual**

Justine Paoletti, Rochester Institute of Technology; David A. Kaiser, PhD, Rochester Institute of Technology

## **14. HRV Biofeedback for Recurrent Abdominal Pain**

Erik Sowder, MS, MSW, BCIA-c, Alliant International University; Richard Gevirtz, Ph.D., Alliant International University; Anu Kotay, MS, Alliant International University; Warren Shapiro, Southern California Permanente Medical Group; Cassie Cannon, CSPP-San Diego; Jenny Murphy, MS

## **15. Cardiovascular Reactivity and Perceived Stress of Women in Chemotherapy**

Laura Roush, MA, University of Cincinnati; Jenny Rademacher, University of Cincinnati; Christine Hovanitz, PhD, University of Cincinnati; Elyse Lower, Robbin Blau

## **16. Treatment of Major Depression Using a Technique for Increasing Energy**

Shelley Spencer-Hellmich, PhDc

## **17. Mexican American and White Caregivers: Are They Different?**

Sharon Lewis, PhD, University of Texas Health Science Center – San Antonio; Peter Nye Bonner, University of Texas- Austin; Paula Blackwell, University of Texas Health Science Center; Jennifer Kretzschmar, University of Texas Health Science Center; D. Allen Novian, MA, St. Mary's University; Monica Escamilla, University of Texas

## **18. QEEG Findings with Adults Reporting a History of Sex Addiction**

Lori Simms, MS, University of North Texas; Richard Davis, MS, LPC; Eugenia Bodenhamer-Davis, PhD, University of North Texas; Leslie Sherlin, MS, QEEG-D, Capella University/Nova Tech EEG, Inc

## **19. Next Generation Biocontrol Interface – OS Independent and Mobile**

Hugh Lusted, PhD, BioControl Systems, LLC; Ben Knapp

# Poster Presentations

## **20. Measuring Physiological Arousal in Changing Emotional States**

Carol Austad, PhD, Central Connecticut State University  
Michael Gendron, Central Connecticut University; Carolyn Fallahi;  
Rebecca Woods

## **21. EEG Correlates of Social and Emotional Processing for Schizophrenia**

Elizabeth Cory, Rochester Institute of Technology

## **22. Comparative Study of Efficacy of ADHD Correction in Different Groups**

Olga Grebneva, Biofeedback Computer Systems Laboratory; Olga Shubina, Institute for Molecular Biology and Biophysics; Mark Shtark, Institute Medical & Biological

## **23. EEG Correlates of SMR and Peripheral Body Rhythm During Flow State Tasks**

Andrew Cutter, BS, Rochester Institute of Technology

## **24. Holistic Approach of Yoga Therapy for Common Migraine in RCT**

Neha Sharma, MSc, PhD, student

## **25. Biofeedback and Emotional Disclosure**

Dmitry Burshteyn, PhD, Siena College

## **26. A Qualitative Study of Diabetic Peoples' Experience of NFB Training**

Siamak Monjezi, PhD

## **27. Stepped Care: Practice or Policy?**

Peder Fagerholm, PhD, Attention Development Programs

## **28. Office vs. Telemedicine Treatment Outcome for Vascular Headache**

John Arena, PhD, VA and Medical College of Georgia; Susan Hannah, Veterans Affairs Medical Center

## **29. One Year Follow-Up of Telemedicine Treatment for Vascular Headache**

John Arena, PhD, VA and Medical College of Georgia; Susan Hannah, Veterans Affairs Medical Center

## **30 Patient Perceptions of Telemedicine Treatment for Vascular Headache**

John Arena, PhD, VA and Medical College of Georgia; Susan Hannah, Veterans Affairs Medical Center

## **31. A Proposed NFB Plan for Disregulated Frontal Alpha Patterns in GAD**

Cynthia Kerson, MA, University of Natural Medicine

## **32. Helping Adolescents Cope with Stress: Mozart or Metal?**

Elise Labbe, PhD, University of South Alabama; Nicholas Schmidt; Jonathan Babin; Martha Pharr

## **33. Longitudinal Studies of NF Efficacy**

Victoria Ibric, MD, PhD, Neurofeedback & NeuroRehab Institute

## **34. Normalize Long-Term Hypertension with Psychophysiological Methods**

Bo von Scheele, PhD, Swedish Center for Stress Medicine

## **35. New Aspects on State and Context Dependent Learning in Music Performance**

Bo von Scheele, PhD, Swedish Center for Stress Medicine

## **36. Inpatient vs. Day Hospital Treatment for Chronic Migraine with Medication Overuse: Initial Findings**

Frank Andrasik, PhD, University of West Florida;  
Licia Grazzi, National Neurological Institute C. Besta, Italy; Susanna Usai, National Neurological Institute C. Besta, Italy; Domenico D'Amico, National Neurological Institute C. Besta, Italy; Gennaro Bussone, National Neurological Institute C. Besta, Italy

## **37. Limited-Contact Behavioral and Pharmacological Treatment for Chronic Migraine with Medication Overuse: Two-year Follow-up**

Frank Andrasik, PhD, University of West Florida;  
Licia Grazzi, National Neurological Institute C. Besta, Italy; Susanna Usai, National Neurological Institute C. Besta, Italy; Domenico D'Amico, National Neurological Institute C. Besta, Italy; Gennaro Bussone, National Neurological Institute C. Besta, Italy

## **38. The Optimal Narrow vs. Wide Electrode Placement to Detect Tension During Both Relaxation and Activity**

Sabine Blaesi, San Francisco State University; Billy R. Hinson, San Francisco State University; Erik Peper, PhD, San Francisco State University

## **39. Pharmacological vs. Behavioral Treatment for Children and Adolescents with Tension-Type Headache**

Frank Andrasik, PhD, University of West Florida;  
Licia Grazzi, National Neurological Institute C. Besta, Italy; Susanna Usai, National Neurological Institute C. Besta, Italy; Domenico D'Amico, National Neurological Institute C. Besta, Italy; Gennaro Bussone, National Neurological Institute C. Besta, Italy

## **40. Basic Tenants of Psychotherapeutic Approach to Healing**

Matthew Hedelius, PsyD, LCSW, Comprehensive Treatment Clinic; A. Todd Freestone, Psy.D., LCSW, Comprehensive Treatment Clinic

## **41. The Mismatch Between Subjective Relaxation and Objective sEMG Activity During Autogenic Training**

Julie Doyle, San Francisco State University; Cheryl Thomas, San Francisco State University; Erik Peper, PhD, San Francisco State University

# Workshops

**Tuesday, April 4, 2006, 7:00 am – 6:30 pm and  
Wednesday, April 5, 2006 7:00 am – 5:30 pm**

## **WS1: Introduction to Biofeedback**

Faculty: Fred Shaffer, PhD, Truman State University; Donald Moss, PhD, Psychological Services Center

Biofeedback offers a range of options for treatment in the current challenging health care environment. This course is critical for the clinician who desires to incorporate biofeedback into clinical practice, as well as for the practitioner who wants to update biofeedback skills. Biofeedback is used both to reduce distress and to enhance adaptive functioning. This workshop will review commonly used biofeedback instruments, training strategies, and treatment protocols for several clinical disorders. The workshop will also present a framework for ethical and professional conduct by the biofeedback clinician.

### **Course Objectives**

(a) Review current clinical applications of biofeedback. (b) Relate the history and development of biofeedback. (c) Identify basic skills and clinical interventions.

### **Who Should Attend**

Psychologists, primary care physicians, nurses, social workers, counselors and others who wish to incorporate biofeedback into their clinical practice and/or wish to meet the didactic education requirements for BCIA certification in general biofeedback.

### **BCIA Blueprint Areas:**

I. Orientation to Biofeedback Don Moss, PhD	4 hours
II. Stress, Coping, and Illness Don Moss, PhD	4 hours
V. Autonomic Nervous System Applications Fred Shaffer, PhD	8 hours
VI. EEG Applications Don Moss, PhD and Fred Shaffer, PhD	4 hours

Hours: 20

Attendees may receive up to 28 CE hours by taking workshops 1 and 2 towards partial fulfillment of the 48-hour didactic course required for BCIA certification.

There are three remaining areas of home study consisting of 20 hours, which must also be completed to fulfill the 48-hour BCIA didactic requirements.

IV. sEMG Applications	8 hours
VII. Adjunctive Interventions	8 hours
VIII. Professional Conduct	4 hours
Home Study Modules:	22 hours

These programs may be ordered from AAPB to complete the 48 hours didactic requirements for BCIA certification in general biofeedback. Please contact AAPB at [aapb@resourcenter.com](mailto:aapb@resourcenter.com) or order online at [www.aapb.org](http://www.aapb.org).

**Wednesday, April 5, 2006, 6:30 pm – 9:30 pm and  
Thursday, April 6, 2006, 8:00 am – 5:00 pm**

## **WS2: Instrumentation**

Faculty: Rich Sherman, PhD, Behavioral Medicine Research & Training Foundation

This workshop is intended for people who have not taken the instrumentation portion of biofeedback training programs and/or did not get much actual experience with equipment. Approximately seven hours of lecture explaining how the sensors are attached, how the sensors work, and what the devices are doing to make the recordings are provided prior to approximately three hours of hands-on experience with the devices. This workshop will help participants make accurate, effective, meaningful recordings and meets the BCIA blueprint requirement for Rubric III – Psychophysiological Recording.

Hands-on: (Presented as the final three hours of the Instrumentation Workshop)

This section of the workshop will provide hands-on experience in using typical modern psychophysiological equipment to record the most common physiological parameters and feedback. Sufficient equipment should be available for participants to work in pairs so they get ample experience actually attaching sensors, checking signal quality, and adjusting the equipment. This workshop is not intended to replace the instrumentation portion of a standard biofeedback or psychophysiological recording course. Participants will become familiar with the basics of instrumentation in the first part of this instrumentation workshop.

### **Course Objectives**

(a) Describe how to attach sensors, check signal quality, and adjust equipment and displays used for recording and feeding back physiological signals most commonly used in applied psychophysiology. (b) Apply knowledge on how to use typical modern psychophysiological equipment. (c) Review the theories of instrumentation.

### **Level: Introductory**

**Wednesday, April 5, 2006, 8:00 am – 12:00 pm**

## **WS3: Succeeding with the Alpha Asymmetry Protocol**

Faculty: Elsa Baehr, PhD, NeuroQuest Ltd.; Roger Riss, PsyD, BCIA Senior Fellow, QEEGT, Madonna Rehabilitation Hospital

This workshop will introduce clinicians to the proper use of the alpha asymmetry protocol for treatment of affective disorders. This protocol, originally developed and patented by J. Peter Rosenfeld, has been now been successfully utilized in hundreds of cases over the past dozen years. Recent developments yielding enhanced training efficiency will be discussed.

# Workshops

## Course Objectives

(a) Relate the scientific foundations for use of the protocol in treatment of depression. (b) Apply a specific research-based template for implementing the asymmetry protocol in their clinical practice. (c) Demonstrate competency in hands-on use of the protocol.

**Level: Intermediate**

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**Wednesday, April 5, 2006, 8:00 am – 12:00 pm**

## WS4: The Physiology of Audio-visual Entrainment Technology

Faculty: Dave Siever, CET, Mind Alive Inc.

Since the discovery of photic driving by Adrian and Matthews in 1934, much has been discovered about the benefits of audio-visual entrainment (AVE). Research on the effectiveness of AVE in promoting relaxation, cognition and hypnotic induction, treating ADD, PMS, SAD, PTSD, migraine headache, chronic pain, anxiety, depression and hypertension is now available. This research will be reviewed in detail.

## Course Objectives

(a) Discuss the basic physiological concepts of audio-visual entrainment. (b) Name the basic psychological aspects of audio-visual entrainment. (c) Review past research on the clinical applications of AVE.

**Level: Intermediate**

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**Wednesday, April 5, 2006, 8:00 am – 12:00 pm**

## WS5: The ADD-Aspergers-Autism Connection-Part 1: QEEG Subtype Diagnostics

Faculty: Michael K. Linden, PhD, ADD Treatment Centers

This is Part 1 of a two-part series workshop, but it can be taken independently. This workshop will present the advances in the diagnosis of Autism, Aspergers and ADD using interviews, behavior rating scales, continuous performance tests and QEEG. The use of QEEG to discover which subtype of Autistic/Aspergers and ADD will be explained. We will discuss the ADD/Aspergers/Autism connection and explain the similarities and differences in symptoms and QEEG patterns. We will present the use of QEEG and continuous performance tests to guide neurofeedback protocol selection.

## Course Objectives

(a) Review assessment methods available to diagnosis Autism, Aspergers and ADD and differentiate them from other similar conditions. (b) Discuss the QEEG subtypes of Autism, Aspergers and ADD and how they differ and overlap. (c) Explain how to use behavior rating scales, CPT tests and QEEG to monitor treatment effects of medications and neurofeedback.

**Level: Advanced**

**Wednesday, April 5, 2006, 8:00 am – 5:00 pm**

## WS6: Stress and Pain Management for Children in a Private Practice

Faculty: Ingrid Pirker-Binder, Mag, Institut Bico, ASTI Association

This workshop offers a model how to work with children with headaches in a private practice with biofeedback equipment using all variables (breathing, EMG, Heart Rate, SCL, temperature), using the Infiniti. It is a hands-on workshop and you will get the protocols for ten sessions. You will learn how to start and organize training sessions and create special stories supporting relaxation and temperature training. Working with children and adolescents is not the same as working with adults. Children are beautiful biofeedback learners, but they need a special training according to their age, to their learning styles and fantasy.

## Course Objectives

(a) Describe how to use Biofeedback equipment in a multimodal way using all graphs. (b) Organize Training Modules for children. (c) Utilize special relaxation stories that enhance biofeedback training

**Level: Introductory**

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**Wednesday, April 5, 2006, 8:00 am – 5:00 pm**

## WS7: Getting Started in Neurofeedback (+ Biofeedback): Fundamentals for Assessment and Training

Faculty: Lynda Thompson, PhD, ADD Centres Ltd.; Michael Thompson, MD, ADD Centres Ltd.

The scientific basis of neurofeedback and the key measurement concepts (EEG frequencies and their behavioural correlates, 10-20 placement system, impedance, etc.) are covered in the context of teaching about EEG and autonomic nervous system profiles. These patterns differ according to symptoms, such as ADHD, learning disabilities, movement disorders (Tourette's, Parkinson's, Dystonia), Asperger's syndrome, seizure disorders, anxiety, dysphoria with ruminations. This workshop covers the fundamentals of assessment (EEG and stress profiles) plus how to set up training programs that combine neurofeedback and biofeedback to ameliorate the difficulties demonstrated during the assessment.

## Course Objectives

(a) Identify the fundamentals that underlie EEG Biofeedback (learning theory and neurophysiology) and Biofeedback of other modalities (skin conduction [EDR], peripheral temperature, respiration, heart rate [RSA] and EMG). (b) Recall characteristic EEG power patterns in the frequency range 2 to 61 Hz. (c) Apply proper EEG procedures (electrode placement, impedance, recognizing and handling artifacts).

**Level: Introductory**

# Workshops

**Wednesday, April 5, 2006, 8:00 am – 5:00 pm**

## **WS8: Stress Management and Neurovideofeedback for Performance Enhancement**

Faculty: Jonathan D. Cowan, PhD, Peak Achievement Training; Steven Radlo, PhD, Western Illinois University

This workshop will introduce wireless neurovideofeedback and describe how it has been used to enhance athletic performance, business productivity and education. Research to support its validity will be presented. Participants will learn to use performance enhancement and stress management techniques to supplement the neurovideofeedback.

### **Course Objectives**

(a) Review the fundamentals of the analysis of mental performance using neurovideos. (b) Practice how to train Focus and Alertness in different ways to enhance performance. (c) Apply other stress management and performance enhancement techniques to complement neurovideofeedback.

**Level: Introductory**

**Wednesday, April 5, 2006, 8:00 am – 5:00 pm**

## **WS9: Advanced Interview Techniques During Neurofeedback**

Faculty: Len Ochs, PhD, OchsLabs

This is an experiential workshop on advanced observation, assessment, quality monitoring, and treatment planning. Although the Low Energy Neurofeedback System (LENS) will be used during the workshop, these techniques apply to all forms of neurofeedback treatment. The focus will be on observing subtle detail, advanced questioning, observation, and non-verbal therapist responses.

### **Course Objectives**

(a) Describe a range of phenomena to observe. (b) Demonstrate a range of verbal and nonverbal actions in response to observations. (c) Describe how to teach a range of self-regulatory procedures to the client.

**Level: Advanced**

**Wednesday, April 5, 2006, 8:00 am – 5:00 pm**

## **WS10: Integrating Stress Management, Imagery, Somatic and Cognitive Approaches with Biofeedback to Enhance Health**

Faculty: Erik Peper, PhD, San Francisco State University

Learn how to train individuals or groups can enhance health. This experiential course focuses on an integrated stress management program. Techniques include biofeedback monitoring and training to change belief structure and monitor the congruence between internal

experience and objective physiological data. It also includes stress awareness, dynamic regeneration, effortless breathing, peripheral hand warming, cognitive self-management, changing internal dialogue, reducing energy drains and increasing energy gains, problem solving, rewriting of unsuccessful behaviors, and self-healing through imagery. (Recommended text: Make Health Happen: Training Yourself to Create Wellness).

### **Course Objectives**

(a) Describe the concepts and structure of an integrated educational stress management program. (b) Demonstrate specific concept exercises to facilitate participants' understanding and motivation. (c) Name specific instructions and practices for teaching cognitive values and self-healing through imagery and behavior change exercises.

**Level: Intermediate**

**Wednesday, April 5, 2006, 1:00 pm – 5:00 pm**

## **WS11: Psychopharmacological Considerations and Biofeedback**

Faculty: Barbara S. Peavey, PhD, PsychoNeuroPlasticity Center

Drugs can have an influence on biofeedback instrument readings. Clinicians need to have a working knowledge of the preparations clients are taking and how a preparation may affect biofeedback instrument readings. This workshop is designed to review and update practitioner knowledge of intake questions to cover, basic psychophysiology or related neurotransmitters, and the effects of various drugs: pharmaceuticals, over-the-counter, food, herbal-vitamins and illicit on both peripheral biofeedback and neurofeedback.

### **Course Objectives**

(a) Create intake questions and rationale. (b) Discuss neurotransmitter function and action of drugs on various neurotransmitters. (c) Discuss drug effects on biofeedback and neurofeedback readings.

**Level: Introductory**

**Wednesday, April 5, 2006, 1:00 pm – 5:00 pm**

## **WS12: Meditation: Tools for Improving Awareness and Self-Regulation**

Faculty: Adam Burke, PhD, MPH, San Francisco State University

This course will explore several major forms meditative practice and examine their role in promoting health and healing. The workshop will emphasize practical in-class experience with these methods from the perspective of using them as resources for improving self-awareness, self-regulation, and general quality of life.



# Workshops

## Course Objectives

(a) Demonstrate knowledge of basic research findings on benefits of meditation for health. (b) Describe primary principles and methods of meditation. (c) Utilize meditative techniques for increase self-awareness and improved self-regulation.

**Level: Introductory**

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**Wednesday, April 5, 2006, 1:00 pm – 5:00 pm**

## WS13: ADD/Aspergers/Autism Connection-Part 2: QEEG Multimodality Treatments

Faculty: Michael K. Linden, PhD, ADD Treatment Centers

Part 2 of the workshop, but can be taken separately. I will present a multimodality treatment approach for students with ADD, Aspergers and Autism. Neurofeedback candidate selection, protocol development and treatment decisions will be explained. Pre-post QEEG and CPT data will be presented. Social skills, parenting, school modifications and psychotherapeutic techniques will be discussed.

## Course Objectives

(a) Utilize QEEG subtypes and computerized testing to guide neurofeedback candidate selection and protocol development. (b) Apply neurofeedback strategies and techniques for ADD, Autism and Aspergers. (c) Review a variety of psychological interventions social skills, parenting/behavior modification, psychotherapy and medications to treat patients with ADD and ASD.

**Level: Intermediate**

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**Wednesday, April 5, 2006, 6:00 pm – 8:00 pm**

## WS14: What Neurofeedback can Learn from General Biofeedback

Faculty: Thomas F Collura, PhD, BrainMaster Technologies, Inc.; Bruno Kappes, PhD, University of Alaska and the Anchorage Biofeedback Clinic; Richard Sherman, PhD, Behavioral Medicine Research & Training Foundation; Henry Weeks, PhD

This panel will discuss overarching principles and lessons learned during the past 50 years of applied psychophysiology and biofeedback, and describe how these apply to neurofeedback. There is a tendency to think of neurofeedback as a “de novo” discipline that has emerged on its own, stemming from EEG-specific research and clinical experience. However, EEG is one of many forms of physiological biofeedback, and shares theoretical, technical, and practical underpinnings with a long tradition and literature in peripheral biofeedback. The foundations of classical and operant conditioning, concurrent learning, and self-efficacy (social learning theory) as primary mechanisms of physiological adaptation will be described, as well as their relevance to the training of physiological variables. There will then be a focus on the fundamental learning strategies that set the

foundation for acquiring any self-regulation or biofeedback skills. The panel will also present a structured explanation of relevant issues that impact neurofeedback training such as systemic changes, overall arousal level, and nonspecific effects

## Course Objectives

(a) Describe the principles of classical and operant conditioning in the context of biofeedback. (b) List the principles that underlie neurofeedback training from a perspective of experimental design. (c) Review the physiological principles that underlie EEG neurofeedback training, and their impact on practical clinical EEG training.

**Level: Intermediate**

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**Wednesday, April 5, 2006, 6:00 pm – 8:00 pm**

## WS15: EEG-BF, Western Science, and Eastern Wisdom in Health Care and Empowerment

Faculty: Liana Mattulich, BCIAC, CEEG, MD, International Inner Key Programs; David Paperny

We will review 20 years experience of optimal performance integration, improving the totality of the human being living in today's society and work environment, with high-level personal demands. We will teach a cohesive training sequence and show how synergistic use of EEG and biofeedback-related tools and Eastern medical techniques can be applied.

## Course Objectives

(a) Review lesser-known theories and procedures for Optimal Performance Integration of the whole person. (b) Assess and select protocols to use in biofeedback for creating three different types of approaches for individualized training in: creativity, intuition in business life, and health during stress. (c) Identify a sequence of crucial steps from traditional wisdom paradigms in providing a comprehensive biofeedback-related training service including four specific cranial meridian points to use in EEG feedback.

**Level: Intermediate**

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**Wednesday, April 5, 2006, 6:00 pm – 8:00 pm**

## WS16: Applications of Heart Coherence Training in Health and Education

Faculty: Phillip A. Hughes, PhD, MFT, Private practice

This workshop will cover clinical and education enhancement applications of heart rhythm feedback. Participants will receive instruction in the use of HeartMath's Freeze-Framer heart rhythm monitor and learn positive emotion-focused techniques for emotional stabilization demonstrated to improve clinical outcomes. Specific applications of heart coherence training to improve client/patient outcomes will be discussed.

# Workshops

## Course Objectives

(a) Review new research on emotional physiology, heart-brain interactions and heart rate variability. (b) Describe the heart coherence technique and how to teach it to clients. (c) Discuss instruction on the clinical applications for HRV feedback and HeartMath techniques.

**Level: Introductory**

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**Wednesday, April 5, 2006, 6:00 pm – 8:00 pm**

## WS17: Case Studies in QEEG Analysis and Neurotherapy Outcomes

Faculty: Jolene Ross, PhD, Advanced Neurotherapy, PC; James Caunt, Advanced Neurotherapy, PC

Case studies based on QEEG analysis using SKIL software (Sterman Kaiser Imaging Laboratory) will be presented. Cases will include Obsessive Compulsive Disorder, Sleep disorder, Reactive attachment disorder, Pervasive developmental delay, Traumatic brain injury. This presentation will include discussion of QEEG analysis, protocol development and pre and post treatment QEEGs.

## Course Objectives

(a) Review the relationship between QEEG presentation and neurotherapy treatment protocol. (b) List some relationships between QEEG patterns and symptomatology. (c) Describe the relationships between neurotherapy, QEEG normalization and improvements in function.

**Level: Intermediate**

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**Thursday, April 6, 2006, 8:00 am – 12:00 pm**

## WS18: SEMG Evaluation of Low Back Pain

Faculty: Stuart Donaldson, PhD, Myosymmetries

The focus of this course is to a) teach a new procedure on how to assess low back pain using SEMG, b) the scientific rationale for such a protocol, c) how to use the protocol for documenting progress and d) how to use the data for planning treatment.

## Course Objectives

(a) Explain the rationale for the protocol including scientific and neurophysiological basis. (b) Demonstrate how to do an evaluation including paperwork, history, pain patterns and SEMG evaluation. (c) Apply the data to learn how to develop treatment plans.

**Level: Intermediate**

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**Thursday, April 6, 2006, 8:00 am – 12:00 pm**

## WS19: Designing Neurofeedback Interventions Based on EEG Assessment

Faculty: Lynda Thompson, PhD, ADD Centres Ltd.; Michael Thompson, MD, ADD Centres Ltd.

Distinct EEG patterns in the raw EEG, augmented by QEEG analysis that includes LORETA imaging, can help distinguish various syndromes and symptom pictures, such as head injuries, memory difficulties, different sub-types of ADHD (high theta/beta, theta/alpha and hi-beta/SMR ratios), the sensory and motor aprosodias of Asperger's Syndrome, Learning Disabilities, previously undiagnosed seizure disorders, panic, anxiety, depression, as well as top performance mental states as seen in athletes and executives. The EEG patterns lead to both corrective interventions and individualized optimal performance protocols.

## Course Objectives

(a) List key symptoms of ADHD Children, Adults Learning Disabilities, Asperger's, Seizure Disorders, Absence Partial Complex, Tonic-Clonic Concussion (TBI) Anxiety, Panic Depression Dysphoria. (b) Distinguish the above disorders by both single channel and 19 channel EEG assessments. (c) Develop a rational intervention based on the assessment data, which combines elements of neurofeedback, biofeedback and cognitive strategies for an individualized mind-body training programme.

**Level: Intermediate**

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**Thursday, April 6, 2006, 8:00 am – 5:00 pm**

## WS20: Analog EEG: The Power is in the Squiggles

Faculty: Marvin Wayne Sams, ND, The Sams Center

Much has been said about how the Quantitative EEG can help shape and guide neurofeedback training. What is often ignored, however, is that the most important information is in the analog EEG recording. Abnormal transient EEG activity is often not identified in the quantitative analysis, and artifacts can unknowingly skew the data, leading to inappropriate training.

## Course Objectives

(a) Record the most accurate EEG data possible. (b) Recognize and differentiate between artifacts, and normal, abnormal, and inefficient EEG activity. (c) Explain how to display the EEG activity to maximize clinical information.

**Level: Intermediate**

# Workshops

**Thursday, April 6, 2006, 8:00 am – 5:00 pm**

## **WS21: Heart Rate Variability Biofeedback**

Faculty: Richard Gevirtz, PhD, Alliant International University; Paul Lehrer, PhD, UMDNJ – Robert Wood Johnson Medical School

This workshop will introduce participants to cardiac variability, the complex patterns of oscillation that comprise it, interpretation of various rhythms, and effects of biofeedback for amplifying respiratory sinus arrhythmia (RSA). We will theorize and/or show how this method can improve homeostatic capacities, improve performance, and enhance resistance to functional illness, and how RSA biofeedback is influenced by cardiovascular resonant frequencies. Experiential and applied exercises will be done, and treatment manuals and applications to autonomic and emotional dysfunction will be discussed.

### **Course Objectives**

(a) Identify the various known oscillations in heart rate, their link with breathing, and known physiological mediators. (b) Describe the theoretical links between the body's homeostatic capacity and both the complexity and amplitude of these oscillations and the data supporting these theories. (c) List the differing resonant frequencies for heart rate and blood pressure and the implications for studying and training baroreflex activity.

**Level: Intermediate**

**Thursday, April 6, 2006, 8:00 am – 5:00 pm**

## **WS22: Neurotherapy in Primary Care**

Faculty: Paul G. Swingle, PhD, Private practice

Neurotherapy is a primary care option for many disorders including depression, anxiety, sleep, pain, ADHD, age related declines. The course covers rapid assessment procedures that identify treatment options that markedly accelerates neurotherapy.

### **Course Objectives**

(a) Utilize Rapid Assessment Procedure. (b) Create a treatment plan. (c) Describe procedures for potentiating neurotherapy.

**Level: Intermediate**

**Thursday, April 6, 2006, 8:00 am – 5:00 pm**

## **WS23: When Do I Add SEMG/Biofeedback to My Clinical Practice?**

Faculty: Gabriel Eugen Sella, MD, MSc, MPH, PhD, BCIA, West Virginia University

The participant will learn to integrate SEMG and SEMG/biofeedback in the clinical practice. The participant may be a clinician in various biofeedback related fields, a researcher or an administrator in the insurance field. The knowledge from this course will allow almost immediate integration of the SEMG practice in one's field.

### **Course Objectives**

(a) Integrate and proceed with SEMG investigation of dysfunctional muscles in clinical practice. (b) Define apply SEMG biofeedback to the clinical and rehabilitation treatment program. (c) Integrate when to use SEMG investigation and biofeedback in the clinical practice.

**Level: Intermediate**

**Thursday, April 6, 2006, 8:00 am – 5:00 pm**

## **WS24: Body, Cognition and Attention in a Therapy for Anxiety and Depression**

Faculty: Daniel Hamiel, PhD, Tel-Aviv Mental Health Center

Dr. David Servan Schreiber is a psychiatrist and neurologist at the school of Medicine at the University of Pittsburgh. In his book *Healing without Freud or Prozac* he calls for a therapy that will be based on the human being's natural way to heal himself. In his book he presents a very impressive scientific back up to his view. In this workshop we will discuss three aspects of the natural way of healing as the base of a psychotherapy for anxiety and depression. 1) The use of Heart Rate Variability biofeedback or balancing the autonomic nervous system to overcome the gap between the cortex and the emotional brain. 2) The use of very simple cognitive behavioral techniques. 3) Mindfulness – learning to control attention. The author will present a protocol that fits this concept and demonstrate the integrated techniques in details including demonstration of relevant biofeedback techniques.

### **Course Objectives**

(a) Describe D. Servan Schreiber concepts. (b) Relate principles of cognitive behavioral therapy combined with psychophysiological principles in a new novel way. (c) Define the role of flexibility in arousal level and attention, with the help of biofeedback devices.

**Level: Intermediate**

**Thursday, April 6, 2006, 8:00 am – 5:00 pm**

## **WS25: QEEG and LORETA Analyses for Neurofeedback Interventions**

Faculty: Joel F. Lubar, PhD, University of Tennessee

Because of the complexity of disorders that are now being evaluated and treated using neurofeedback interventions, it is becoming increasingly necessary to employ quantitative EEG analyses ranging from single to 19 channels in order to develop appropriate protocols for treatment. For example, more than six subtypes of attention deficit hyperactivity disorder have been identified through QEEG analysis. This workshop will demonstrate—using equipment and actual participants—the recording of multi-channel EEG, the use of databases, advanced artifact rejection, and analysis for choosing appropriate protocols for treatment, and use of LORETA imaging.

# Workshops

## Course Objectives

(a) Demonstrate the 10-20 and 75 electrode system and explain recording montages and EEG signatures and to demonstrate with actual equipment how EEG information is recorded and processed. (b) Demonstrate how artifact is removed from the data and how data is processed for topographic mapping and database analyses. (c) Discuss the importance of QEEG evaluation for determining appropriate protocols and their usefulness in determining outcome which can lead to better treatment as well as better reimbursement for treatment.

**Level: Intermediate**

**Thursday, April 6, 2006, 1:00 pm – 5:00 pm**

## WS26: New Thinking about Neurofeedback Models of Efficacy

Faculty: Siegfried Othmer, PhD, The Brian Othmer Foundation

Recent clinical developments in neurofeedback require updating of models of efficacy. Reward- and Inhibit-based training represent fundamentally different challenges to the brain. Further, reward-based training has bifurcated into discrete and continuous reinforcement strategies. Traditional operant-conditioning models must be updated with the latest findings in cognitive neuroscience.

## Course Objectives

(a) Discuss the current status of clinical work in neurofeedback within the field at large. (b) Demonstrate the “small-world network” model of brain function. (c) Review maintenance of neuronal assemblies; the frequency basis of brain functional organization; single-site and multiple-site relationships, and their failure modes.

**Level: Advanced**

**Thursday, April 6, 2006, 1:00 pm – 5:00 pm**

## WS27: Neurofeedback Advanced (BCIA Review Course)

Faculty: Lynda Thompson, PhD, ADD Centres Ltd.; Michael Thompson, MD, ADD Centres Ltd.

This workshop covers areas from the BCIA Blueprint of Knowledge Workshop, information relevant to all neurofeedback practitioners. This short course samples the domain of knowledge helpful for all neurofeedback practitioners but it may also be a helpful review for candidates who intend to take the BCIA examinations in the future. Basic definitions and descriptions will be discussed. It will review highlights concerning the history of neurofeedback, research criteria for determining efficacy, neurophysiology, neuroanatomy, source of the electroencephalogram (EEG), instrumentation, procedures for assessment and intervention and comment on adjunctive techniques, including biofeedback.

## Course Objectives

(a) Review answers to questions on material that could be covered in a BCIA examination on EEG Biofeedback. (b) Discuss EEG data collection and instrumentation. (c) Demonstrate an understanding of how learning theory applies to EEG biofeedback.

**Level: Advanced**

**Sunday, April 9, 2006, 1:00 pm – 5:00 pm**

## WS28: If Your Only Tool Is a Hammer, Everything Looks Like a Nail

Faculty: Elizabeth Lowe Stroebel, PhD, Private Practice

Biofeedback clinicians who possess a variety of clinical tools and/or work in close association with an associate with complementary tools are in the best position to deliver efficacious services. A multi-modality approach to pain, somatoform disorders, stress-disorders, dysponesis, anxiety, and depression will be presented. A range of modalities from the time-honored QR techniques to the latest neurotechnology will be discussed.

## Course Objectives

(a) Identify the differences and commonalities between peripheral biofeedback and neurofeedback. (b) Explain how combining modalities can enhance therapeutic response. (c) Demonstrate specific techniques and combined approaches for common clinical conditions.

**Level: Intermediate**

**Sunday, April 9, 2006, 1:00 pm – 5:00 pm**

## WS29: Affirmation, Imagery and Self-Hypnosis: Tools for Positive Change

Faculty: Adam Burke, PhD, MPH, Lac, San Francisco State University

The cultivation of optimism and positive thinking are keys to healing, personal empowerment and a successful life. In this workshop participants will learn to work with affirmation, imagery and self-hypnosis as simple tools to increase resiliency, personal resourcefulness, and positive outcomes.

## Course Objectives

(a) Review primary principals and methods of affirmation, imagery and hypnotic suggestion. (b) Utilize fundamental hypnotic induction and deepening techniques successfully. (c) Discuss the elements of imagery, including relaxation and metaphor, effectively.

**Level: Introductory**

# Workshops

**Sunday, April 9, 2006, 1:00 pm – 5:00 pm**

## **WS30: Stress Management, Sport Psychology and BF/Psychophysiology with Elite Performers**

Faculty: Wes Sime, PhD, University of Nebraska

Principles of sport psychophysiology including arousal, composure, focus, alertness, concentration, functional relaxation, rhythm, timing, pace will be presented in the context of competitive performance. Unique applications of technology (HRV, EMG, EEG) and methodology (EMDR, PMR, VMBR and CISD) will be used in examples with competitors in golf, baseball, gymnastics as well as other critical incident workers.

### **Course Objectives**

(a) Integrate psychophysiology principles with athletes, parents and coaches. (b) Apply unique techniques such as EMDR, VMBR and CISD to reduce the negative interpretation of anxiety in performance. (c) Utilize the language of sport performance and the personal relationship skills to make entry into the highly competitive world of athletic excellence.

**Level: Introductory**

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**Sunday, April 9, 2006, 1:00 pm – 5:00 pm**

## **WS31: Neurofeedback and Pain – How to Measure Progress for Research Purposes**

Faculty: Victoria L Ibric, MD, PhD, Therapy and Prevention Center

Chronic pain development, various pain theories, such as the “gate theory” (Melzack), peripheral components and the central mechanisms or “corticalization” of pain (Bierbaumer) will be reviewed. The classification of pain based on localization, origination, diagnostic and complexity will be presented. This workshop will also introduce the audience to the methods of collecting data regarding the set up, protocols and data analyses of the results obtained with neurofeedback training applied to chronic pain patients. A number of case studies will be analyzed. Some longitudinal studies will also be introduced for the clarification of the learning mechanism that is the basis for the neurofeedback efficacy.

### **Course Objectives**

(a) Explain why the NF is so beneficial in correcting the pain perception in severe cases of chronic pain. (b) Collect data for the evaluation and the comparison between different chronic pain syndromes. (c) Summarize the practical aspects in setting up NF protocols and the data analyses of the results.

**Level: Intermediate**

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**Sunday, April 9, 2006, 1:00 pm – 5:00 pm**

## **WS32: Treatment Protocols and Operation of the DAVID Audio-Visual Entrainment Systems**

Faculty: Mr. Dave Siever, CET, Mind Alive, Inc.

To date, several thousand psychologists have acquired the DAVID audio-visual entrainment (AVE) devices for both personal and professional use. However, many clinicians don't utilize the full functionality of their AVE systems. Nor have there been a written set of established guidelines to help guide clinicians select the appropriate protocols for treating the various conditions and dysfunctions sustained by their clients. This course includes treatment protocols for three types of insomnia, chronic fatigue, fibromyalgia, trauma, anxiety, depression, seasonal affective disorder, ADD, ADHD and cognitive disorders. We will learn how to program sessions on the DAVID Session Editor so that clinicians may design sessions for their clients. In addition to session design, we will also cover how to use the “heartbeat” on the DAVID systems for HRV training.

### **Course Objectives**

(a) To learn about the formats used in the session protocols and understand the reasons for them. (b) To learn about chair-side manner and side-effects that can occur during or after an AVE session. (c) To learn how to use AVE as a powerful assist to heart-rate variability training.

**Level: Advanced**

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# Short Courses

**Friday, April 7, 6:45 am – 8:15 am**

## **SC1: Breathing Beyond the Diaphragm: Anatomical Imagery and Feldenkrais**

Faculty: Timothy J. Sobie, MS, PT, NW Mind Body Learning Institute, PLLC

Too often, Breathing Retraining occurs in the context of fixed and static sitting positions. Strain gauge biofeedback sensors limit awareness of breathing possibility to chest vs. belly. From a Somatic Systems perspective, these dimensions are simply not adequate. This workshop will involve participants in direct experience of developmental self-synchrony to self-adjust their surrounding skeletal configuration toward optimal spatial-temporal coherence through sensory guided movement.

### **Course Objectives**

(a) Demonstrate an embodied-experiential appreciation of the elements of 'synthesis and coherence.' (b) Apply an internal and transferable sense of conditioning a somatic-postural intersegmental relationship. (c) Experience embryological developmental movement patterns and Yogic Hand Arrangements (Mudras).

**Level: Introductory**

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**Friday, April 7, 6:45 am – 8:15 am**

## **SC2: Combined Modalities: HeartMath and the LENS (Neurofeedback)**

Faculty: Stephen Larsen, PhD, BCIA, Stone Mountain Center

HeartMath is a technique of self-regulation using Heart Rate Variability as a way to calm the Autonomic Nervous System. The LENS is a neurofeedback modality that shows results with Central Nervous System dysfunction. Together they form a treatment for people suffering from a variety of problems of dysregulation. Theory is accompanied by case-histories and clinical data comparing brainwaves and heart-rate entrainment scores.

### **Course Objectives**

(a) List the underlying principles of both the LENS and HeartMath. (b) Demonstrate theoretical and practical reasons why clinicians could employ both modalities effectively. (c) Review clinical examples of how both are used with the same patient.

**Level: Introductory**

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**Friday, April 7, 6:45 am – 8:15 am**

## **SC3: Progress in Neurofeedback for Autism**

Faculty: Siegfried Othmer, PhD, The Brian Othmer Foundation

Tremendous strides have been made in recent years in addressing the functional deficits that characterize the autism spectrum. This course will cover our own findings in that regard and that of others, report on the objective progress measures, the protocols employed, and the rationale underlying these protocols

### **Course Objectives**

(a) Review history of NF for the autistic spectrum. (b) Discuss relevant models of autism and the applicability of NF. (c) Discuss protocols.

**Level: Intermediate**

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**Friday, April 7, 6:45 am – 8:15 am**

## **SC4: A Multi-Modal Treatment for Recurrent Abdominal Pain: Kaiser Permanente Protocol**

Faculty: Richard Gevirtz, PhD, Alliant University; Warren Shapiro, MD, FAAP, Kaiser Permanente; Erik Sowder, MS, Kaiser Permanente

This course will offer a psychophysiological treatment model for a prevalent childhood disorder, Recurrent Abdominal Pain (RAP). To provide a context, an overview of the mediational model will be described by Richard Gevirtz, PhD. A leading gastroenterologist, Warren Shapiro, MD will then present the nature of RAP and the shortfalls of traditional medical approaches. Subsequently, certified biofeedback practitioner, Erik Sowder, MS, will present a treatment protocol along with results from a multiple case study of this protocol.

### **Course Objectives**

(a) understand the mediational model for RAP. (b) recognize shortcomings of conventional treatment to RAP. (c) learn biofeedback treatment protocol to RAP.

**Level: Intermediate**

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# Short Courses

**Saturday, April 8, 7:00 am – 8:30 am**

## **SC5:** Promoting Your Biofeedback Practice: Practically and Spiritually

Faculty: Susan E. Antelis, MPS, BCIA-C, Network Biofeedback Services, Inc.

This course will provide the participant with concrete marketing suggestions and techniques specific to biofeedback, with inspiration to continue to promote this valuable therapeutic modality. Promotional and resource material will be shared in the handouts. Methods of interdisciplinary outreach and communication will also be explored.

### **Course Objectives**

- (a) Discuss marketing differently, depending upon the target audience.
- (b) Employ free or inexpensive practice-promoting techniques.
- (c) Cite the steps to transcend frustration to inspiration in a competitive market.

**Level: Introductory**

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**Saturday, April 8, 7:00 am – 8:30 am**

## **SC6:** An Overview of the LENS Approach

Faculty: Len Ochs, PhD, OchsLabs

This short course presents an overview of the Low Energy Neurofeedback System developed by Len Ochs, PhD. The history, conceptual framework, software, and research will be discussed and demonstrated. Attendees will understand why the average duration is between 13 and 20 sessions.

### **Course Objective**

- (a) Review the history and concepts central to the Low Energy Neurofeedback (LENS) approach.
- (b) Apply the USE 3 LENS application as well as the OchsLabs Report Generator.
- (c) Discuss the strengths and weaknesses of the LENS approach.

**Level: Introductory**

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**Saturday, April 8, 7:00 am – 8:30 am**

## **SC7:** Autonomic Dysfunction in Fibromyalgia: Physiology, Precipitating Causes, and Interventions

Faculty: Gail Adler, MD, PhD, Harvard Medical School  
Mary Lee Esty, LCSW-C, PhD, Neurotherapy Center of Washington  
Norton L. Fishman, MD, FACP, CNS, Optimal Health Physicians

This panel will focus on fibromyalgia from three different perspectives. The first perspective is the relationship with chronic fatigue syndrome. The second perspective will review causes of ANS dysfunction in fibromyalgia and making the case for multiple treatment interventions. The third perspective will raise the hypothesis that stress-induced alterations in hypothalamic-pituitary-adrenal axis and the autonomic nervous system activity may contribute to symptoms of fatigue noted in individuals with disorders such as fibromyalgia and chronic fatigue syndrome.

### **Course Objectives**

- (a) Describe the effect of acute stressors on the hypothalamic-pituitary-adrenal axis and autonomic nervous system response to subsequent stressors in healthy individuals.
- (b) Explain how infection can cause ANS, endocrine and immune system dysfunction.
- (c) Review brain mapping as an important part of good treatment planning for FMS patients.

**Level: Intermediate**

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# Continuing Education

The Continuing Education Courses of AAPB are designed for psychologists, nurses, social workers, primary care physicians, counselors, and all other health care professionals, unless otherwise noted in the workshop or short course description. The designation "CE" by any program denotes that continuing education credit is available.

**For Psychologists:** The Association for Applied Psychophysiology and Biofeedback is approved by the American Psychological Association to sponsor continuing education for psychologists. AAPB maintains responsibility for this program and its content. Credit is granted on a one credit per one contact hour basis, i.e. an hour lecture provides an hour of credit.

**For Nurses:** The Association for Applied Psychophysiology and Biofeedback is approved as a provider of continuing nursing education (CNE) by the Colorado Nurses' Association, which is accredited as an approver of CNE by the American Nurses' Credentialing Center's Commission on Accreditation. Credit is provided on the basis of one contact hour per 50 minutes of class.

**For Physicians:** This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of PESI HealthCare, LLC and the Association for Applied Psychophysiology and Biofeedback. PESI HealthCare, LLC is accredited by the ACCME to provide continuing medical education for physicians.

## AMA PRA Statement

PESI HealthCare, LLC designates this educational activity for a maximum of 51.75 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.

**Social Workers:** This course is co-sponsored by Amedco and Applied Psychophysiology. Amedco, ASWB provider #1082, is approved as a provider for continuing education by the Association of Social Work Boards, ([www.aswb.org](http://www.aswb.org), phone: 1- 800-225-6880) through the Approved Education (ACE) program. Amedco maintains responsibility for the program. Social workers should contact their regulatory board to determine course approval. Social workers will receive 51.50 continuing education clock hours in participating in this course.

## Professional Counselors

This course is co-sponsored by Amedco and Applied Psychophysiology and Biofeedback. Amedco is recognized by the National Board for Certified Counselors to offer continuing education for certified counselors. We adhere to NBCC continuing education guidelines. Provider #5633. 51.75 hours.

**BCIA Recertification:** Hour-for-hour attendance in short courses and workshops is accepted with the certificate of attendance for Category A – accredited continuing education. General Session hours are accepted as electives. BCIA accepts credits that have been approved for CE by APA.

## Speaker Disclosure Statements

Continuing Medical Education has a policy regarding disclosure of financial relationships. It requires course faculty to disclose whether or not they have financial interests or affiliations with organizations with a direct and substantial interest in the subject matter of their presentations.

**Continuing Education Certificate Policy:** If you would like a certificate of attendance for continuing education purposes, please add a \$49 processing fee. The fee covers the accreditation processing costs. You must return exams and evaluations to receive your certificate. Certificates of Attendance will be mailed following the Annual Meeting only upon submission of the exam and evaluation form.

## General Session Objectives

- To examine biofeedback in the realm of new developments in neuroscience.
- To review the brain based behavior in stress related disorders.
- To update biofeedback research.



# Biofeedback Certification Institute of America Events



## BCIA Certification Examinations

**Friday, April 7, 2006 • 6:00 pm – 9:00 pm**

Written exams for the certification programs of BCIA will be offered. Only qualified, pre-approved candidates who have made prior arrangements may be seated for this exam. Contact BCIA for registration details at 303-420-2902.

## Certification 101 – Everything You Need to Know About BCIA Certification

**Saturday, April 8, 2006 • 12:00 pm – 12:30 pm**

If you have wondered about becoming a BCIA certified practitioner in either General Biofeedback, EEG Biofeedback, or Pelvic Muscle Dysfunction Biofeedback, this informal discussion will lead you through the process and requirements and answer any questions you may have.

## Recertification 101 – Everything You Never Knew About Recertification

**Saturday, April 8, 2006 • 12:30 pm – 1:00 pm**

Let BCIA tell you about changes in recertification policy that makes it a very user-friendly process. Come and bring your questions about recertification.

## Mentoring Workshop – Moving Away from the Standard Supervision Model

**Saturday, April 8, 2006 • 1:00 pm – 3:00 pm**

BCIA's requirement of hands-on training is applied within a mentoring model. Please join us to learn more about this and how you can fit into the process of training new candidates for certification. The role of the mentor, structure of the mentoring process and ethical issues involved in mentoring certification candidates will be discussed. This workshop, led by Dr. Celeste DeBease, is appropriate for all certification candidates or certificants interested in mentoring. Space reserved on first-come-first served basis.

*2 category A accredited hours of continuing education*

## BCIA University Seminar

**Saturday, April 8, 2006 • 3:00 pm – 4:00 pm**

If you teach a university program based on the BCIA blueprints or are interested in offering this course at your institution, please join us for a roundtable discussion led by Dr. Fred Shaffer who teaches a general biofeedback course at Truman State University.

## BCIA Town Hall Meeting

**Saturday, April 8, 2006 • 4:00 pm – 5:00 pm**

We want to hear from you! Please come and meet some of your BCIA Board members and join us for this informal time of sharing information.

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## BCIA Events Registration Form

**Please check all events you plan to attend on Saturday, April 8, 2006.**

- |  |  |
|--|--|
| <input type="radio"/> Certification 101, 12:00 pm – 12:30 pm           | <input type="radio"/> Recertification 101, Saturday, 12:30 pm – 1:00 pm    |
| <input type="radio"/> Mentoring Workshop, 1:00 pm – 3:00 pm            | <input type="radio"/> BCIA University Seminar, Saturday, 3:00 pm – 4:00 pm |
| <input type="radio"/> BCIA Town Hall Meeting, 2006 – 4:00 pm – 5:00 pm |  |

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ E-Mail \_\_\_\_\_

Please submit registration to BCIA by March 10, 2006.

**BCIA**

**10200 West 44th Avenue, #310, Wheat Ridge, CO 80033**

**Phone: (303) 420-2902 Fax: (303) 422-8894 Email: [bcia@resourcenter.com](mailto:bcia@resourcenter.com)**

# General Information

## AAPB Trade Show

This annual event will again bring together a diverse group of products and services. We encourage you to stretch your imagination and explore the ever-changing tools and new technologies available from the exhibiting companies. Our exhibitors are committed in their support of AAPB's membership and invite you to visit their booths, ask questions, attend their demonstrations and, of course, take advantage of the exceptional values offered during this year's Trade Show. If you are interested in exhibiting at this year's Annual Meeting, please contact the AAPB office.

## Exhibit Hours

### Thursday, April 6

Exhibitor/Registration move-in	8:00am – 2:00pm
Opening Reception	6:30pm – 8:00pm

### Friday, April 7

Trade Show open	10:30am – 7:00pm
Reception/Cash Bar	5:00pm – 7:00pm
Poster Session	5:15pm – 7:00pm

### Saturday, April 8

Trade Show open	10:00am – 6:00pm
Reception/Cash Bar	4:30pm – 6:00pm

## Annual Meeting Bookstore

The AAPB Bookstore showcases the talents and diversity of the AAPB Membership. Be sure to visit the AAPB Bookstore and browse the selections that represent authors who are AAPB members or speakers at the 37th Annual Meeting. If you are interested in adding your book to the AAPB Bookstore, please contact Tammy Gustin at tgustin@resourcenter.com.

## AAPB Silent Auction

AAPB will once again be offering top-of-the-line equipment and services during its silent auction. This will be your opportunity to find wonderful bargains on instruments you have been waiting to buy. You can also take advantage of donations made by hotels and other services. All proceeds go to fund research in the biofeedback and applied psychophysiology field. Come and be a part of this exciting event. If you are interested in contributing an item or service for auction, contact Amanda Pocsik at apocsik@resourcenter.com.

## Accessibility for Persons with Disabilities

The Hilton Portland and Executive Tower offers a wide range of accommodations for individuals with disabilities. When making your hotel reservation, please identify any special requirements.

## Message Center/Bulletin Board

A general message board will be located in the lobby. Individuals offering or seeking employment opportunities may post their job descriptions or resumes on the Bulletin Board.

## Proctors Needed

Anyone (especially students) interested in volunteering to be a proctor for the workshops and short courses at the Annual Meeting may do so by contacting the AAPB office. Proctors attend a workshop or short course free of charge in exchange for collecting attendee tickets, distributing handouts, monitoring sign-in sheets, and assisting speakers as needed. To be eligible to proctor, **you must register for the full meeting**. If interested, please fax (303)422-8894 or email Michael Gill, mgill@resourcenter.com, your proctor request beginning Monday, February 6, 2006 at 8am as needed. Please list three courses, in order of preference, that you would like to proctor and the best way to contact you. **Please note: Proctors will be assigned courses in order of requests received. We are unable to accept any early requests.**

## Program

Please bring this Program with you to the conference. The detailed description of events will not be duplicated in the materials handed out to attendees on-site.

## Smoking Regulations

There shall be no smoking in the meeting rooms at any time.

## Special Meeting Rooms

Individuals who wish to schedule informal meetings during the conference may request a room by contacting Sally Kittredge at skittredge@resourcenter.com. Notice of such meetings may be posted following AAPB's approval of the room assignment. Meetings must be consistent with AAPB's meeting policy.

## Recording of Presentations

Short courses, keynote addresses, and symposia will be audio-recorded on-site. Audio tapes and/or CDs may be purchased in the registration area.

The preparation of tape recordings, audiovisual tracks and images for subsequent sale, group presentations, or individual use is strictly prohibited.

## The Annual Program Committee requests your cooperation in observing the following guidelines for etiquette in session rooms:

- Videotaping, audio taping, or photographing the presentations is strictly prohibited.
- Mobile phones, pagers and other devices generating sound must be turned off in the session rooms.
- Attendees using laptop computers, personal digital assistants, or other electronic devices generating light must sit in the back half of the room to avoid disturbing fellow attendees.

Please respect your colleagues and follow the rules!

# General Information

## Special AAPB Division, Section, Business and Educational Meetings

AAPB currently has seven Special Interest Sections and two Special Interest Divisions. Members elect to join these groups when they pay their annual dues. At the Annual Meeting, each group meets and offers a variety of programs. These can include a special lecture or presentation, a panel, a discussion, or a social hour. All AAPB members are invited and encouraged to attend section/division meetings.

Allied Health Professional Section	Friday, April 7	7:00pm – 8:00pm
Applied Respiratory Psychophysiology Section	Friday, April 7	12:00pm – 1:00pm
Education Section	Friday, April 7	12:00pm – 1:00pm
International Section	Thursday, April 6	8:00pm – 9:00pm
Mind/Body Medicine Section Special Presentation by David Spiegel, MD	Thursday, April 6	8:00pm – 9:00pm
Neurofeedback Division Special Presentation by Mario Beauregard, MD	Friday, April 7	7:00pm – 10:00pm
Optimal Functioning Section	Saturday, April 8	12:00pm – 1:00pm
Performing Arts Section	Thursday, April 6	7:00pm – 8:00pm
sEMG/SESNA Division	Saturday, April 8	12:00pm – 1:00pm
Chapters A representative from each chapter is invited to a roundtable discussion Ideas on how to enhance chapter membership, meetings and activities will be exchanged.	Friday, April 7	6:00pm – 7:00pm
Claude Bernard Club (By invitation)	Saturday, April 8	6:00pm – 9:00pm
Nurses Breakfast Nurses, please join us for breakfast and an informal meeting. This is your chance to share what you are doing and get to know other nurses in AAPB.	Friday, April 7	6:45am – 8:15am

## Travel and Transportation

### Host Hotel Information

The Hilton Portland and Executive Tower hotel lies in the heart of downtown city center's financial and entertainment districts. The Hilton Portland and Executive Tower offers 782 guest rooms in two separate towers. The main building features a dramatic winding staircase and is adorned in mahogany and original Northwest art. Alexander's Restaurant and Lounge provides a panoramic view of the Cascade Mountains, rivers and Portland skyline. Other amenities include a full-service business center, concierge desk and a full-service athletic club. The 12,000 sq. ft. Hilton Athletic Club offers an indoor pool and jacuzzi, extensive cardiovascular equipment, free weights, sauna and steam room, tanning, personal fitness training, and massage services. The new Executive Tower features 327 boutique style guest rooms, showcasing Suite Dreams by Hilton luxury beds with triple sheeting and down duvet comforters. All Executive Tower guest rooms provide the standard amenities plus high speed internet access, minibar, terrycloth robes, and an umbrella. The Executive Tower features the

award winning Porto Terra Tuscan Grill and Bar, 24-hour fitness center with indoor waveless lap pool, and 24-hour self-serve business center.

### Hotel Reservations

AAPB has reserved a block of sleeping rooms at a discounted rate. This allows AAPB the use of the meeting and exhibit space at a great discount. Your support in staying at the Hilton Portland and Executive Tower helps to keep AAPB's meeting and membership costs down. The discounted rate for the Annual Meeting is \$119 single/double occupancy plus applicable taxes. To receive this special rate, you must identify yourself as an AAPB attendee. To make your reservations, call 503-226-1611 or 800-445-8667. The deadline to make your reservations and receive the discounted rate is March 6, 2006.

### Air Travel

AAPB has negotiated special low rates with United Airlines. To obtain the discount, call the Meeting Plus Reservation Center at 800-521-4041 and refer to the meeting ID code: 539TC. You will receive a 5% discount off the lowest applicable discount fare, including First Class,

# General Information

or a 10% discount off full-fare, unrestricted coach fares, purchased seven days in advance. An additional 5% discount will apply when tickets are purchased at least 30 days in advance of your travel date. Discounts also apply on Shuttle by United and United Express. Dedicated reservation agents are available Monday – Friday, 8:00am – 10:00pm EST and Saturday – Sunday, 8:00am – 8:00pm EST.

## Ground Transportation

To receive the special discounted rate through Hertz, please call 800-654-2240 and reference the Meeting Number: CV#022R1350.

The Hilton Portland and Executive Tower works in conjunction with a shuttle company, Blue Star. The shuttle departs from Portland International Airport (PDX) every thirty minutes. The price is \$13 each way. For more information, please call 503-249-1837.

The light rail is also available from Portland International Airport (PDX). The drop off location is two blocks from the hotel. For more information, please call 503-238-7433.

The approximate price for a cab ride from Portland International Airport (PDX) to the Hilton Portland and Executive Tower is \$30.

## Registration Information

Please take a moment to review the following registration policies and procedures to avoid any delays in your registration processing for the 2006 Annual Meeting.

### Registration Fees/Benefits

Registration for the AAPB Annual Meeting includes symposia, keynotes, invited speakers, entry to the Exhibit Hall, conference materials, all receptions, admission to the Saturday night party (with cash bar), and a copy of the final program. One-day registrants will receive the above-mentioned events for the day they attend only.

Pre and post conference workshops require separate registration.

### Registration Desk Schedule

<b>Tuesday, April 4</b>	6:30 am – 9:00 am (Workshop 1 attendees only)
	5:00 pm – 7:30 pm
<b>Wednesday, April 5</b>	6:30 am – 1:30 pm
	4:00 pm – 7:00 pm
<b>Thursday, April 6</b>	7:00 am – 7:30 pm
<b>Friday, April 7</b>	6:30 am – 7:30 pm
<b>Saturday, April 8</b>	6:30 am – 7:00 pm
<b>Sunday, April 9</b>	7:30 am – 2:00 pm

### Deadline

Registrations postmarked on or before March 3, 2006 qualify for early discounted registration fees. All registrations received after March 17, 2006 will be processed on-site at the conference.



## Make your hotel reservations today!

The Hilton Portland  
and Executive Tower

Call 503-226-1611 or 800-445-8667  
to get a discounted rate of \$119

The deadline to make your  
reservations and receive the  
discounted rate is **March 6, 2006.**

## Course Cancellations and Refunds

AAPB reserves the right to cancel any workshop or short course that does not meet minimum attendance requirements. Tickets for canceled workshops or short courses may be exchanged on-site. Refunds for canceled workshops or short courses will be issued by the AAPB office after the conclusion of the Annual Meeting.

### Cancellation Policy for Attendees

Cancellations received in writing by March 17, 2006 will be issued a refund less a \$50 processing fee. All refunds will be processed following the Annual Meeting. **No refunds** will be issued for requests received after March 17, 2006.

### Workshop Registration Information

In order to attend a short course or workshop scheduled after the opening reception on Thursday evening, April 6, attendees must register for either the full meeting or pay the one-day registration fee for the day that the workshop or short course is scheduled.

**Registration** for all AAPB events is provided via the website, [www.aapb.org](http://www.aapb.org), for those paying by credit card.

### Name Tags

All attendees at the meeting sessions or exhibits must register and wear their name tags to gain entry to presentations or the Exhibit Area.

### Tickets Required

Admission to workshops and short courses is by ticket only. Tickets may be purchased either through pre-registration or on-site. Tickets purchased on-site will be strictly on a space-available basis.

Questions: Call AAPB (800) 477-8892

# AAPB's 37th Annual Meeting Registration Form • April 6-9, 2006

One registration form per attendee. Copy this form as needed. (Please print or type)

Last Name: \_\_\_\_\_

## 1. Registrant Information

Name: \_\_\_\_\_  
First Last Credentials

Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_  
 \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Postal/Zip Code: \_\_\_\_\_

Country: \_\_\_\_\_ Is this a new address:  Yes  No

Day Phone: (\_\_\_\_) \_\_\_\_\_ FAX: (\_\_\_\_) \_\_\_\_\_

E-mail address (print clearly): \_\_\_\_\_

License # \_\_\_\_\_

First-time Attendee?  Yes  No New Member since 4/05  Yes  No

Are you BCIA Certified?  Yes  No If yes, for  General BF and/or  EEG??

Confirmation Preference  email  mail

### For Continuing Education purposes

Please check all that apply:  Nurse  Physician  Social Worker

Psychologist  Physical Therapist

## 2. Fee Schedule

	Early Discount Before 3/3/06	Regular After 3/3/06
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### Full Registration

AAPB Member  \$325  \$399

Spouse of AAPB Member  \$325  \$399

ISNR Member  \$325  \$399

ISMA Member  \$325  \$399

Nonmember  \$425  \$499

Full-time student (enclose copy of ID)  \$80  \$90

### One-Day Registration

Friday, 4/7/06  \$179  \$199

Saturday, 4/8/06  \$179  \$199

Sunday, 4/9/06  \$179  \$199

Registration received after 3/17/06 will be processed on site.

Registration Fee: \$ \_\_\_\_\_

\*Discount: \$ \_\_\_\_\_

\*Deduct (\$15) for each additional registration from the same organization submitted at the same time. Excludes students and one-day registrations.

Registration Fee Total: \$ \_\_\_\_\_

Are you a speaker?

Yes  No Type \_\_\_\_\_

## 3. Workshops

Planning to Proctor? Only indicate workshops and short course that you intend to pay for.

See page 26 for proctoring details.

Tues, (7am – 6:30pm)	Wed (7am – 5:30pm)	WS1							
Check box to attend									
Wed, (6:30pm – 9:30pm)	Thurs (8am – 5pm)	WS2							
Check box to attend									
Wed (8am – 12pm)		WS3	WS4	WS5					
Indicate 1st, 2nd, & 3rd choice									
Wed (8am – 5pm)		WS6	WS7	WS8	WS9	WS10			
Indicate 1st, 2nd, & 3rd choice									
Wed (1pm – 5pm)		WS11	WS12	WS13					
Indicate 1st, 2nd, & 3rd choice									
Wed (6pm – 8pm)		WS14	WS15	WS16	WS17				
Indicate 1st, 2nd, & 3rd choice									
Thurs (8am – 12pm)		WS18	WS19						
Indicate 1st, 2nd, & 3rd choice									
Thurs (8am – 5pm)		WS20	WS21	WS22	WS23	WS24	WS25		
Indicate 1st, 2nd, & 3rd choice									
Thurs (1pm – 5pm)		WS26	WS27						
Indicate 1st, & 2nd choice									
Sun (1pm – 5pm)		WS28	WS29	WS30	WS31	WS32			
Indicate 1st, 2nd, & 3rd choice									

Member		Non-Member		Cost
Early Reg. Before 3/3	Regular Reg. After 3/3	Early Reg. Before 3/3	Regular Reg. After 3/3	
<input type="checkbox"/> \$399	<input type="checkbox"/> \$449	<input type="checkbox"/> \$469	<input type="checkbox"/> \$499	
<input type="checkbox"/> \$249	<input type="checkbox"/> \$289	<input type="checkbox"/> \$259	<input type="checkbox"/> \$299	
<input type="checkbox"/> \$110	<input type="checkbox"/> \$130	<input type="checkbox"/> \$140	<input type="checkbox"/> \$170	
<input type="checkbox"/> \$220	<input type="checkbox"/> \$240	<input type="checkbox"/> \$240	<input type="checkbox"/> \$270	
<input type="checkbox"/> \$110	<input type="checkbox"/> \$130	<input type="checkbox"/> \$140	<input type="checkbox"/> \$170	
<input type="checkbox"/> \$49	<input type="checkbox"/> \$69	<input type="checkbox"/> \$79	<input type="checkbox"/> \$99	
<input type="checkbox"/> \$110	<input type="checkbox"/> \$130	<input type="checkbox"/> \$140	<input type="checkbox"/> \$170	
<input type="checkbox"/> \$220	<input type="checkbox"/> \$240	<input type="checkbox"/> \$240	<input type="checkbox"/> \$270	
<input type="checkbox"/> \$110	<input type="checkbox"/> \$130	<input type="checkbox"/> \$140	<input type="checkbox"/> \$170	
<input type="checkbox"/> \$110	<input type="checkbox"/> \$130	<input type="checkbox"/> \$140	<input type="checkbox"/> \$170	

Workshop Total: \$ \_\_\_\_\_

4. Short Courses

Indicate 1st, 2nd, & 3rd choice for each time slot

Fri (6:45am – 8:15am)	SC1	SC2	SC3	SC4
Indicate 1st, 2nd, & 3rd choice				
Sat (7am – 8:30am)	SC5	SC6	SC7	
Indicate 1st, 2nd, & 3rd choice				

Member		Non-Member		Cost
Early Reg. Before 3/3	Regular Reg. After 3/3	Early Reg. Before 3/3	Regular Reg. After 3/3	
<input type="checkbox"/> \$42	<input type="checkbox"/> \$50	<input type="checkbox"/> \$50	<input type="checkbox"/> \$60	
<input type="checkbox"/> \$42	<input type="checkbox"/> \$50	<input type="checkbox"/> \$50	<input type="checkbox"/> \$60	

Short Course Total: \$ \_\_\_\_\_

5. CE Certificate Fee

Individuals who need **proof** of attendance for continuing education purposes, please add a \$49 processing fee.

CE Fee \$ 49

6. Nurses Breakfast – All nurses invited

Friday, April 7, 6:45am – 8:15am

\$20

7. Section/Division Meetings

(Please indicate your intent to attend) See schedule on page 5.

Allied Health Professionals Section	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Applied Respiratory Psychophysiology Section	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Education Section	<input type="checkbox"/> Yes	<input type="checkbox"/> No
International Section	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Mind/Body Medicine Section	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Neurofeedback Division	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Optimal Functioning Section	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Performing Arts Psychophysiology Section	<input type="checkbox"/> Yes	<input type="checkbox"/> No
sEMG/SESNA Division	<input type="checkbox"/> Yes	<input type="checkbox"/> No

8. Please indicate your intent to attend

Thursday, April 6

KEY1 – David Spiegel	<input type="checkbox"/> Yes	<input type="checkbox"/> No
RECOpen – Opening Reception	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Friday, April 7

KEY2 – Steven Wolf	<input type="checkbox"/> Yes	<input type="checkbox"/> No
LUNED – Meet the Editor Lunch	<input type="checkbox"/> Yes	<input type="checkbox"/> No
LUNST – Student Roundtable	<input type="checkbox"/> Yes	<input type="checkbox"/> No
INV1 – Diane Newman	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM01 – Jan Newman	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM02 – Larry Stevens	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM03 – Timothy Culbert	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM04 – Fraser Lawrie	<input type="checkbox"/> Yes	<input type="checkbox"/> No
INV2 – Jamie Pineda	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM05 – Michael Linden	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Saturday, April 8

KEY3 – Gail Adler	<input type="checkbox"/> Yes	<input type="checkbox"/> No
INV3 – Steven Porges & C. Sue Carter	<input type="checkbox"/> Yes	<input type="checkbox"/> No
INV4 – Mario Beauregard	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM06 – Kayle Sandberg-Lewis	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM07 – Jonathan Cowan	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM08 – Katee Wynia	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM09 – Robert Coben	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM10 – George Rozelle	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM11 – David Siever	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SYM12 – Robert Kall	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Saturday Night Biofeedback Bistro	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Sunday, April 9

SP01 – Richard Gevirtz	<input type="checkbox"/> Yes	<input type="checkbox"/> No
SP02 – Distinguished Scientist	<input type="checkbox"/> Yes	<input type="checkbox"/> No
KEY4 – Robert Stern	<input type="checkbox"/> Yes	<input type="checkbox"/> No

9. Room Sharing Plan

AAPB can assist interested members in identifying shared hotel lodging opportunities at the The Hilton Portland and Executive Tower for the Annual Meeting. If you plan to attend and are looking for a roommate, please complete this section and AAPB will send you a list with the names of other members who are interested in sharing a room.

Note: We will contact you by email or fax. Please make sure you have included your email address or fax number in Section 1.

Male  Female  Smoker  Non Smoker

Check in date \_\_\_\_\_ Check out date \_\_\_\_\_

10. Method of Payment

Total Due \$ \_\_\_\_\_

Option 1 – Total amount due

Total Enclosed: \$ \_\_\_\_\_

Payment Plan:

Option 2 – Minimum of \$200 deposit payable now, balance to be paid by March 10, 2006.

Deposit: \$ \_\_\_\_\_ (Check dates below)

Payment schedule:

Charge additional payment(s) OR  I will send in additional check(s) to my credit card below.

Please indicate below the dollar amount you wish each payment to be.

Payment 1 – \$ \_\_\_\_\_ by January 17, 2006  Payment 3 – \$ \_\_\_\_\_ by March 10, 2006

Payment 2 – \$ \_\_\_\_\_ by February 15, 2006

American Express  Visa  Master Card  Discover

Card # \_\_\_\_\_

Expiration Date \_\_\_\_/\_\_\_\_/\_\_\_\_ Amount to be charged: \$ \_\_\_\_\_

Name on the card: \_\_\_\_\_

Signature: \_\_\_\_\_

Notes

- JOIN AAPB NOW and use member-rate registration fees. [www.aapb.org](http://www.aapb.org)
- FULL-TIME STUDENTS: May take a 50% discount for Workshops and Short Courses.
- SPECIAL SERVICES: If you have a disability which may require special accommodations in order to fully participate in the AAPB Annual Meeting, please contact the AAPB office at (800) 477-8892 to discuss your specific needs.

**Cancellation Policy:**

**Cancellations received in writing by March 17, 2006 will be issued a refund less a \$50 processing fee. NO refunds will be granted after March 17, 2006. Refunds are processed following the conference.**

**Mail or fax form with payment to**

**AAPB, 10200 West 44th Avenue, Suite 304**

**Wheat Ridge, CO 80033-2840, USA**

**Phone: (800) 477-8892, Fax: (303) 422-8894**

**Questions? Email [aapb@resourcenter.com](mailto:aapb@resourcenter.com)**

# Annual Meeting Host Location: Portland, Oregon

With its many attractions, Portland is popular as both a business and tourist destination. AAPB is looking forward to combining the two in April 2006.

Once known as America's best kept secret, Portland is now one of the country's hottest travel destinations. Long recognized as the "City of Roses," Portland has blossomed into its own, gaining recognition as the city of books, bikes, beer, and blooms. The majestic 11,235-foot Mount Hood lies to the east, while lush green hills on the west frame Portland's alluring skyline. *Money* magazine recently ranked Portland #2 among Big Cities in which to live in the U.S., and its unique and thriving festivals, outdoors and dining scenes keep it consistently among the travel hotspots. Portland has the personality of a small community and the activities and vitality of a large city.

In Portland, getting around is a breeze. And it's easy to find limitless recreation, fabulous dining and flourishing culture. And, oh yes — the nation's largest variety of local microbrews. See for yourself. You are invited to come early or stay late to enjoy all that Portland has to offer.

## MAX Light Rail

The award-winning MAX light rail system runs on a 38-mile track connecting downtown to its east and west suburbs and is the only west coast city to offer direct rail service to and from the airport. The PDX light rail station is conveniently located next to the south baggage claim area. Also, Airport MAX's low-floor trains mean that luggage rolls easily on and off the cars; riders never have to struggle with stairs. Downtown-to-airport travel time is approximately 38 minutes. MAX service begins around 4:30 a.m. and runs every three to ten minutes until midnight.

## Portland Streetcar

A new \$56.9 million streetcar system now links Portland's downtown Cultural District, the Pearl District, the Northwest/Nob Hill neighborhood and Portland State University. The sleek European-designed streetcars follow a 4.8-mile loop route that travels through the PSU campus, downtown Portland, the art gallery-filled Pearl District and Nob Hill, known for its outstanding restaurants and upscale shopping.

## "Fareless Square"

There is such a thing as a free ride in Portland. Transportation on all MAX light rail trains, buses, trolleys and streetcars is free in the 330-block area called "Fareless Square," which encompasses downtown Portland and stretches across the Willamette River to include the Oregon Convention Center, Rose Garden arena (home to the NBA's Portland Trail Blazers) and the Lloyd Center mall.

## Northwest Fresh: Restaurants, Wines and Microbrews

A new generation of cooks in the 1990s has created a distinctive Northwest cuisine in Portland's dining establishments — a nouvelle style that reemphasizes local products and produce: fresh oysters, crabs, clams, tuna, and Chinook salmon; local lamb and beef; crisp apples and pears; flavorful blackberries, cherries, raspberries; and fine cheeses such as Oregon blue (plus anything made by Tillamook).

To accompany your meal, may we suggest an Oregon wine? Perhaps a delicately perfumed Pinot noir? Or, perhaps, one of the riot of handcrafted beers that places Portland at the center of America's craft-brewing renaissance? Finish with a fresh marionberry tart and a snifter of our local eau de vie, which is known to rival the best of France. The fact that we have no food and beverage sales tax just adds to your dining pleasure.

## Tax-Free Shopping

With no sales tax, Portland is a haven for commerce regardless of budget, transportation or personal style. Haute couture and hot cuisine rule Portland's Pearl District, which has quickly become the place to see

and be seen. You can also find great shopping areas in bustling Nob Hill/Northwest Portland, another of the city's hippest hubs.

Seemingly designed for people-watching, the main streets never fail to produce an eclectic mix of leather-clad Harley riders congregating outside Starbucks, immaculately dressed West Hills' shoppers searching for imported linens, and boisterous Gen-Xers enjoying pizza and microbrews at sidewalk cafes.

Portland Saturday Market is the nation's largest open-air market for handcrafted goods. Located in the Old Town District, the market offers more than 250 craft booths, as well as an international food court and live entertainment. Open Saturdays and Sundays March through December.

## What to See and Do

Drown out the city noise in the Portland Classical Chinese Garden, an entire city block of tranquility. Ride the only three-door elevator west of the Mississippi at Powell's City of Books, the world's largest independent bookstore. Powell's spans a full city block and rises three stories to house its selection of one million new, used and out-of-print titles. Visit the Oregon Zoo, where more Asian elephants have been born than in any other North American city. Get caught in an earthquake registering 5.5 on the Richter scale at the Oregon Museum of Science & Industry (OMSI). Visit turn-of-the-century Victorian and Georgian homes along the tree-lined blocks of Northwest 21st and 23rd avenues that have been reincarnated, housing more than 250 unique shops, brewpubs, art outlets and eateries. Hob-nob with local artists in the Pearl District's elegant cafes, exotic boutiques, and fine art galleries. Learn about the mysterious past of the Old Town/Chinatown District. Or experience some of the nightlife that Old Town is best known for today. Catch dramatic city views as you stroll or bike along the new Eastbank Esplanade.



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