

BE

Biofeedback Foundation of Europe

7th Annual Meeting

Physical Medicine and
Rehabilitation Institute,
Gervasutta Hospital
Udine, Italy

February 18 - 22, 2003



Workshop Presenters & Titles

Nino Basaglia, M.D.

Use of Biofeedback in Motor Rehabilitation of
People with Hemiplegia After Stroke

Paolo Di Benedetto, M.D.

Diagnosis and Treatment of Bladder, Sphincter
and Pelvic Floor Dysfunction

Jeffrey Bolek, Ph.D.

SEMG Motor Rehabilitation Applications for Children

Howard I. Glazer, Ph.D.

Treating Pelvic Pain

John Gruzelier, Ph.D. & Tobias Egner BSc. Hons

Practical & Theoretical Relevance of Neurofeedback for
Schizophrenia & Optimal Performance in Healthy People

Jay Gunkelman, QEEG, QEEG

QEEG Measurement

Daniel Hamiel, Ph.D.

Biofeedback & Cognitive-Behavioural Therapy

Glenn Kasman, PT, MS

Surface EMG in Physical Medicine

Juri Kropotov, Prof. Dr.

ERD/ERS in Biofeedback

Roberto Merletti, Prof. Eng.

New Frontiers in Surface EMG

Donald Moss, Ph.D.

Anxiety and Psychosomatic Disorders

Alexandra Nanke, Dr. rer. nat

Clinical Applications of Biofeedback

Paolo Pascolo, Prof. Eng.

Principles of Mechanical Measures in the Diagnostic Process

Giovanna Pelamatti, Prof.

Biofeedback in Sport Medicine

Erik Peper, Ph.D.

Stress Management & Preventing RSI

Marsilio Saccavini, M.D. & Emiliana Bizzarini, M.D.

Biofeedback Therapy in Facial Nerve Lesions

Gabriel E. Sella, M.D.

Clinical Applications of SEMG Biofeedback

M. Barry Sterman, Ph.D.

EEG The New Frontier

Ute Strehl, Ph.D.

Self-Regulation and Slow Cortical Potentials (SCP)

Luigi Tesio, M.D.

Biofeedback, Balance and Postural Reactions

Lynda Thompson, Ph.D. & Michael Thompson M.D.

Using EEG for Assessment and Treatment

Vietta S. Wilson, Ph.D & Henk Kraaijenhof, P.T., BA

Achieving High Performance

The Biofeedback Foundation of Europe

The Biofeedback Foundation of Europe (BFE) was founded to promote a greater awareness of biofeedback among European health professionals, and through training workshops, educate clinicians in the use of biofeedback techniques and technology.

The Foundation's advisory board is comprised of leading clinicians and researchers from multiple disciplines who share a common interest in the dissemination of information about this rapidly growing field.

INTRODUCTION

The BFE is holding its 7th Annual Meeting in Italy from February 18-22, 2003. The workshops will be in the Physical Medicine and Rehabilitation Institute (*Gervasutta* Hospital) which is one of the largest rehabilitation hospitals in northern Italy. It has a physical therapy school, three physical rehabilitation departments, one cardiac rehabilitation department and one lung disease department.

Udine stands at the centre of the Friuli-Venezia Giulia Region on the international route which links up the south and the north-east of Europe. It is a great place to visit for knowledgeable tourists, known for its extraordinary beauty. Marco Polo international airport of Venice (www.veniceairport.it) is served by many international flights and is located within easy reach of Udine, about 123 kilometers away. The international airport of Trieste (www.aeroporto.fvg.it) is about 37 kilometers away with daily flights from Milan's Malpensa airport and Rome's Fiumicino airport. There are excellent train connections to Udine. For more information, including a schedule, special offers, and online ticket office, visit (www.trenitalia.com).

Most conference activities will take place at the *Gervasutta* Hospital, 48 *Gervasutta* Street, 33100 UDINE (Italy). The *Gervasutta* is located less than 2 km from the heart of the downtown area and Udine's central railway station. The three hotels chosen for the conference offer superb bedroom accommodation and breakfast. While in Udine, conference participants can enjoy its monuments and museums as well as excellent shopping and restaurants to suit all tastes and all of the city is accessible by foot. The weather in Udine in February is generally cool and wet.

The host country's symposia/course directors, Nino Basaglia, Emiliana Bizzarini, Paolo Di Benedetto, Roberto Merletti, Paolo B. Pascolo, Giovanna Maria Pelamatti, Marsilio Saccavini, Tullio Scrimali & Liria Grimaldi and Luigi Tesio, have put together an excellent Italian and international program. There are a wide range of topics including motor rehabilitation, diagnosis and treatment of pelvic floor dysfunction, surface electromyography, mechanical measures in diagnosis, sports medicine, repetitive strain injury, cognitive behaviour therapy, stress management, anxiety disorders and psychosomatic disorders. These topics will be of interest to psychiatrists, neurologists, psychologists, sports physicians, engineers, physical therapists, athletic educators, and other health professionals.

The BFE is pleased to co-host the EEG Track with the European Chapter of The Society for Neuronal Regulation (E-SNR). The workshops and scientific program have been co-arranged by the BFE and E-SNR Board of Directors: Juri D. Kropotov, Jonelle Villar, and Patricia Bellinghausen. The BFE and E-SNR are pleased to provide a number of workshops to registrants who have already participated at previous BFE conferences with new workshop leaders in addition to some old favorites. The wide scope of topics covered by the EEG Track workshops shall meet the educational needs of participants with various levels of training in EEG Biofeedback. Both 1-day and 2-day courses will be offered.

For more information on the conference please visit the BFE website www.bfe.org or contact Mark Schwartz, projectmgr@bfe.org

TUESDAY
18-Feb

WEDNESDAY
19-Feb

THURSDAY
20-Feb

FRIDAY
21-Feb

SATURDAY
22-Feb

	Registration	Registration	Registration	Registration	Registration
8:00-8:30					
8:30-9:00					
9:00-9:30	Workshops	Workshops	Plenary Lecture	Workshops	Workshops
9:30-10:00					
10:00-10:30					
10:30-11:00					
11:00-11:30	Refreshments	Refreshments	Refreshments	Refreshments	Refreshments
11:30-12:00	Workshops	Workshops	Scientific Sessions	Workshops	Workshops
12:00-12:30					
12:30-13:00					
13:00-13:30	Lunch	Lunch	Lunch	Lunch	Lunch
13:30-14:00					
14:00-14:30					
14:30-15:00	Workshops	Workshops	Scientific Sessions	Workshops	Workshops
15:00-15:30					
15:30-16:00					
16:00-16:30					
16:30-17:00					
17:00-17:30	Break	Break	Break	Break	Break
17:30-18:00					
18:00-18:30	Welcome Reception	Opening of Scientific Program and Exhibitions	Scientific Sessions	Gala Dinner	Farewell Reception
18:30-19:00					
19:00-19:30					
19:30-20:00					
20:00-20:30					
20:30-21:00					
21:00-21:30					
21:30-22:00					
22:00-22:30					
22:30-23:00					

SURFACE EMG IN PHYSICAL MEDICINE

Glenn Kasman, PT, MS

Introduction including, physiological rationale, recording technique, safety, electrode placements, troubleshooting, and very basic clinical concepts.

Limitations – covers limitations of surface EMG, normalization, data management, understanding clinical EMG standards, motor learning, setting patients up for success, and EMG - triggered electrical muscle stimulation.

Surface EMG in Physical Medicine: Testing & Assessment

Days 3 & 4 must be taken together and include assessment and feedback training techniques, interpretation; specific applications for headache, TMD, whiplash and other cervical problems, shoulder impingement, instability, and scapular pain syndromes, carpal tunnel, tennis elbow, low back and trunk dysfunction, hip pain, general knee rehab, ACL rehab, and patellofemoral dysfunction; and a module on applications for neurological rehab.

CLINICAL APPLICATIONS OF SEMG BIOFEEDBACK

Gabriel E. Sella, M.D.

SEMG methodology has been used successfully in the investigation and treatment of a number of clinical conditions. The subject will be discussed over a two-day period on the clinical aspects of investigation and treatment of the following pathologies: (a) tension headache, (b) primary muscular neck pain (c) secondary muscular neck pain from overuse of the accessory muscles of respiration, (d) chest pain of muscular origin and (e) low back pain. The participant will learn to recognize clinically, by differential diagnosis, the presence of symptoms specific to the above conditions. The participant will learn to apply SEMG muscular investigation on specific muscles affecting the condition in order to determine the specific locations of biofeedback treatment. The participant will learn to apply SEMG biofeedback treatment modality by specific protocols for each of the above conditions.

TREATING PELVIC FLOOR PAIN

Howard I. Glazer, Ph.D.

This workshop starts with the basics of SEMG and deals with a number of applications of pelvic floor muscle dysfunction with a focus on pelvic and vulvovaginal pain disorders. It includes a detailed review of the structure and functioning of the pelvic floor and the principles and practical application of SEMG biofeedback. The focus is on didactic presentation for the first day and a half followed by practical hands-on demonstration for participants who wish to experience the technology and patient demonstration evaluations. The workshop includes instructional presentation, demonstration and hands-on instruction in the use of clinical and home-training devices.

INVITATION TO THE XVIII EAGO-EBCOG CONGRESS OF OBSTETRICS AND GYNAECOLOGY



On May 12 – 15, 2004, the XVIII EAGO-EBCOG European Congress of O & G will take place in historic Athens.

The 2004 Congress will cover a range of topics including current issues relating to science and practice in O & G, such as HRT, contraception, operative gynaecology, and medical and technical aspects in O&G. The subspecialties of Materno-Foetal Medicine, Gynaecological Oncology, Reproductive Medicine and Uro-gynaecology will be presenting their important achievements in their fields - including molecular biology and genetics.

For further information, please contact Prof. Georges CREATSAS at: geocre@aretaieio.uoa.gr

We look forward to meeting you in Athens in 2004!

EUROPEAN CHAPTER OF THE SOCIETY FOR NEURONAL REGULATION



The European Chapter of SNR is a non-profit organization established in 2002 as a section of the Society for Neuronal Regulation, an international membership organization of professionals from various disciplines, which supports education and excellence in the field of neuroregulation.

Today, EEG biofeedback, also called neurofeedback, is the most commonly used form of neuroregulation. It is often used in conjunction with other forms of biofeedback as well as with whatever other professional services its practitioners are additionally qualified and licensed to render such as, psychology, medicine or clinical social work.

The goals of the European Chapter of SNR are: and to advance research, training and education in the field of neuroregulation and applied neurophysiology and to promote the development of the field in Europe and its recognition and awareness by the European public.

To this end, E-SNR endeavors to expand and maintain multiple fora for interchange and dissemination of advances in the field, and to foster co-operation and establish relationships with relevant European organizations, such as BFE. The Inaugural Meeting of E-SNR, to be held conjointly with the BFE, is an important initial step in the implementation of these objectives.

INTRODUCTION TO QEEG BASED NF PROTOCOL DESIGN

Jay Gunkelman, QEEGD, QEEGT

This day long workshop will cover a breadth of topics, from the very basics of neuroanatomy and neurophysiology, to the 10-20 electrode placement system, with a discussion of the brain's functional cortical topography. A focus on details such as the definition of terms in EEG will be maintained. This will cover the EEG waveform morphologies and clinical findings, from detection of artifacts to normal EEG variants like Mu, Lambda, FMT, BRE, Gamma, POSTS, K-Complex, Sigma, and even some clinical patterns such as seen in epilepsy, FIRDA, strokes and brain surgeries. We will review and discuss correlative work showing perfusion and EEG partial correlation. In qEEG based NF protocol design, we will discuss the pathophysiology of ADD/ADHD, OCD/ODD, depression, head injury, and NF intervention in these areas.

QUANTITATIVE EEG ANALYSIS AND NF PROTOCOL DESIGN

Jay Gunkelman, QEEGD, QEEGT

Using the basics from day one as a starting point, more advanced topics will be covered, such as the artifacts and distortions introduced from quantitative analysis: Gibbs/leakage, smearing, windowing, aliasing, and Nyquist resolution's effect on frequency analysis. The topic of remontaging and qEEG analysis will be covered, with discussion of "false frontal alpha" and spatial distortions due to referencing choices. General qEEG patterns and findings will be covered, with qEEG based NF recommendations done in various areas such as: lower voltage EEG, slow patterns, frontal alpha or theta, midline OCD/ODD patterns, anxiety, bipolar disorder, epilepsy, beta spindles, and even 40 Hz. The various patterns reported in and clinical use of coherence and comodulation will be covered. Advanced topics will include a review of Direct Current (D.C.) or "slow cortical potential" applications, along with evoked potential based evaluations and NF applications.

NEW APPROACHES FOR DIAGNOSIS AND NEURO-THERAPY OF BRAIN DYSFUNCTIONS

Juri Kropotov, Prof. Dr.

So far the modern fashion of neurotherapy was based on the comparison of individual spectral characteristics of EEG with normative databases. No responses of the brain to sensory, motor or cognitive events were used. This workshop is aimed to fill this gap and show the advantages of application of Event-Related Potentials (ERPs) and Event-Related De-Synchronization (ERD/ERS) – in neurofeedback. ERPs are phase-locked post-synaptic potentials induced by external stimuli or movements, while ERD/ERS reflect changes in the oscillating mode of the cortex associated with stimuli, thoughts or movements. The methods for recording and assessing these parameters will be presented, including Continuous Performance Tasks, wavelet decomposition, mapping techniques, statistical analysis. Examples

of application of ERPs and ERD/ERS for assessment of attention disorders, depression, dyslexia, addiction, aging, etc. will be discussed. The main part of the workshop will concern a new approach in neurotherapy – the one based on ERD/ERS analysis. The approach will include the method of application of wavelet decomposition for selecting individual frequency bands and electrode placements as well as the behavioral paradigms associated with training of executive functions. Participants will get the opportunity to work with a 21-channel QEEG/ERP/ERD/ERS acquisition and analysis system as well as with a 2-channel home trainer.

PRACTICAL & THEORETICAL RELEVANCE OF NEUROFEEDBACK FOR SCHIZOPHRENIA AND OPTIMAL PERFORMANCE IN HEALTHY PARTICIPANTS

John Gruzelier, Ph.D & Tobias Egner BSc.Hons

Applications from our laboratory at Imperial College London of various neurofeedback protocols and their theoretical background will be outlined. These include slow potential hemispheric shifts in schizophrenia (Gruzelier et al, 1999; Gruzelier, 2000) and music performance enhancement in conservatoire students with alpha/theta training (Gruzelier et al, 2002; Egner and Gruzelier, submitted). In addition evidence of cognitive and electrophysiological validation of the beta1 and SMR with concurrent suppression of slower and faster frequencies will be presented along with evidence of carryover effects on resting EEG rhythms as a result of training (Egner and Gruzelier, 2001; Egner et al, 2002). Implications for the processes underlying the enhancement of theta will also be addressed in connection with the benefits for virtuoso musical performance, and studies comparing the effects of relaxation on theta (Egner et al, 2002).

BIOFEEDBACK OF SLOW CORTICAL POTENTIALS IN EPILEPSY AND OTHER NEUROLOGICAL DISORDERS

Ute Strehl, Ph.D.

Slow cortical potentials of the EEG reflect cortical excitability. Negative potentials appear in animals as well as in humans before and during epileptic seizures which are followed by positive potential shifts after their abatement. This leads to the hypothesis that epileptic patients are deficient in regulating cortical hyperactivation. Operant learning and behavioural principles can be used to develop a treatment program to control slow cortical potentials and to teach patients to cope with seizures. The aim of the workshop is to encourage psychologists as well as medical staff in treating epilepsy with this psychophysiological training program. The topics are; epilepsy, epidemiology, classification, treatment and prognosis; EEG; slow cortical potentials; self regulation of slow cortical potentials; treatment protocols. Further fields of application include brain-computer-interface and attention deficit/hyperactivity disorders. Participants who want to learn how to use the equipment and would like the experience of regulating their slow cortical potentials are invited to a supplementary session on a second day.

USING EEG FOR ASSESSMENT AND TREATMENT

Lynda Thompson, Ph.D & Michael Thompson M.D.

This workshop is about achieving excellent results using EEG biofeedback. The workshop covers assessment (including QEEG) and training for sub-types of Attention Deficit Hyperactivity Disorder, seizure disorders, depression, anxiety, and Asperger's Syndrome. The Thompsons present their published results with ADD clients. Participants will learn how to do neurofeedback with one or two channels (electrode placement, frequencies, handling artifacts) and how to combine it with biofeedback (temperature, EDR, respiration) and other techniques including metacognition, sound and light, cerebral blood flow feedback and nutrition.

EEG: THE NEW FRONTIER

M. Barry Sterman, Ph.D.

This workshop provides an objective examination of what EEG is, what it tells us about the brain, how to properly obtain and evaluate topographic data, and how to use that information to most effectively apply the method of neurofeedback. The principles reviewed in the workshop are based on many years of controlled laboratory studies. These quantitative EEG (QEEG) studies addressed the correlates of both normal and abnormal brain functioning. The workshop material will cover many unresolved issues and shortcomings associated with both research and clinical use of EEG. Dr. Sterman will describe improved methods and unique assessment metrics that have proven essential

SEMG APPLICATIONS FOR CHILDREN IN NEED OF MOTOR REHABILITATION

Jeffrey Bolek, Ph.D.

This workshop covers the use of SEMG as a tool to improve functional outcome. Participants will learn about problems and challenges in treating children aged 18-months to 18-years in need of motor education/re-education; the application of learning theory principles in the development of the treatment plan; methodological considerations to setting up a treatment plan with children and special considerations for a variety of disorders including cerebral palsy, head injury, status post selective dorsal rhizotomy, muscular dystrophies and stroke. The workshop will also cover specific case studies including motor re-education with a 5-year-old blind child with cerebral palsy, a program designed to enhance neutral sitting; motor re-education with a post-astrocytoma resected 10-year-old child, special considerations for children in acute, chronic pain and some advanced treatment protocols for reaching motor re-education goals. The workshop will present an innovative approach to the remediation of motor deficits in children. It will present both the practice model and the theory behind the model. It has been successfully used for the past five years in over 5000 treatment sessions. The major goal is the efficient return of function of lost motor skills for children that have been injured and the acquisition of skills for those who have not developmentally achieved them.

THE COMBINATION OF BIOFEEDBACK AND COGNITIVE-BEHAVIORAL PSYCHOTHERAPY WITH CHILDREN

Daniel Hamiel, Ph.D.

This workshop is designed to demonstrate the efficiency and applicability of a combination of Biofeedback and Cognitive-Behavioral Psychotherapy. The principles of CBT will be introduced in a novel way, based on the mind-body (physiological-cognitive) connection. The techniques of a short-term integrated therapy adapted for kids will be presented as well as protocols for the treatment of both daily situations and acute exceptional events. The protocols of encopresis, anxiety disorders, including obsessive-compulsive disorder and test anxiety will be discussed in detail. A special focus on individual and group therapy for acute stress such as exposure to a terror attack, or loss of relatives in violent incidents will be made. For test anxiety the presenter will demonstrate a group biofeedback therapy. The use of biofeedback equipment will be demonstrated. This course is designed for psychotherapists and clinical biofeedback practitioners who work with children and adolescents.

ACHIEVING HIGH PERFORMANCE

Henk Kraaijenhof P.T., BA & Vietta S. Wilson, Ph.D.

This seminar provides practical assessment and training for achieving high performance in personal, professional or sport life. How to choose and use biofeedback modalities, organise, and individualise training programs will be shown. New technologies and tools for maintaining a balanced life while enhancing performance will be discussed. The workshop will focus on how to integrate biofeedback-assisted self-regulation with mental training skills for individuals who need consistent high performance, typically under stress or time pressure. The workshop is ideal for sports psychologists, counselors, physical therapists, athletic trainers, clinical psychologists, educators, and other health care professionals. Additional research and resources are provided in an extensive bibliography.

BIOFEEDBACK FOR CLINICAL PRACTICE: ANXIETY AND PSYCHOSOMATIC DISORDERS

Donald Moss, Ph.D.

The objective of the workshop is to provide participants with a basic orientation to the use of heart rate variability (HRV) biofeedback for anxiety disorders. Day 1 covers cardiovascular and respiratory physiology and HRV biofeedback; a general overview and introduction to HRV as applied to managing stress and anxiety disorders. Day 2 covers the psychophysiology of the anxiety disorders, and assessment procedures including a multi-modal psychophysiological baseline, capnometric evaluation of respiration with a hyperventilation trial, and an initial baseline of heart rate variability.

CLINICAL APPLICATIONS OF BIOFEEDBACK: PSYCHOSOMATIC DISORDERS, PAIN & MEDICALLY UNEXPLAINED SYMPTOMS

Alexandra Nanke, Dr. rer. nat.

In the treatment of patients with psychosomatic disorders or medically unexplained symptoms, biofeedback is a useful additional tool because of its high credibility "seeing is believing." Psychophysiological demonstrations and behavioral experiments will be shown to change maladaptive cognitions like catastrophizing interpretation of bodily symptoms. It will be worked out how to combine, cognitive interventions with biofeedback to enhance treatment success. Another target is to improve the patients perception of self-efficacy by experiencing the controllability of physiological processes. Therefore, a multichannel biofeedback system will be used (to measure SEMG, EDA, HR, Temperature, and Respiration). In the practical part, the attendees will have the opportunity to apply the biofeedback methods and a biofeedback protocol will be shown.

STRESS MANAGEMENT: MAKE HEALTH HAPPEN BY TRAINING YOURSELF TO CREATE WELLNESS

Erik Peper, Ph.D.

This workshop outlines and teaches the components of a systematic 14 session stress program with biofeedback to reverse illness and mobilize health. Includes illness risk factors, stress awareness, dynamic regeneration, effortless breathing, peripheral hand warming, cognitive self-management and change of the internal dialogue, problem solving, rewriting of unsuccessful behaviors, and self-healing through imagery and self-management. The workshop includes guidelines for individuals and groups. Recommended text: *Make Health Happen: Training Yourself to Create Wellness*.

PREVENT RSI WITH BIOFEEDBACK: A SYSTEMS APPROACH FOR HEALTH COMPUTING TO REVERSE AND PREVENT REPETITIVE STRAIN INJURY

Erik Peper, Ph.D.

This workshop focuses on strategies to prevent computer-related disorders, such as repetitive strain injuries – (RSI). It includes an overview of computer-related disorders (CRD), definitions and systems perspective, the role of ergonomics, work style, stress management vision, regeneration, fitness and somatic awareness. It also focuses upon the use of applied psychophysiology for assessment, ergonomic optimization, training, prevention, remediation and implementation at the work site. Included are guidelines for computer workstation psychophysiological assessment, SEMG work-site assessment and training and the basic framework to implement prevention programs incorporating the seven components for healthy computing. The workshop is based upon the book by Peper and Gibney, *Healthy Computing with Muscle Biofeedback: A Practical Manual for Preventing Repetitive Motion Injuries*.



AMERICAN
PSYCHOSOMATIC
SOCIETY

61st Annual Scientific Meeting

March 5 – 8, 2003

Sheraton Crescent Hotel – Phoenix, Arizona

Invited Symposium:

- General vs Specific Risk Factors for Progression of Cardiovascular Disease and HIV/AIDS

Case Conference Grand Rounds:

- Non-Cardiac Chest Pain

Pre-Conference Workshop:

- * Neuro Mechanisms of Pain and Emotion:
Implications for Treatment (March 5, 2003)

The meeting will also offer:

Workshops, Symposia, Papers, Posters and more!!



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Email: info@psychosomatic.org or call (703) 556-9222.

JEFFREY BOLEK, PH.D.

Jeffrey Bolek, Ph.D. is Director of Psychology and Director of the Motor Control Program at the Cleveland Clinic Children's Hospital for Rehabilitation in Cleveland, Ohio. Dr. Bolek graduated from Kent State University in 1982 with a Ph.D. in Psychology. For the past 14 years he has worked at the Cleveland Clinic Children's Hospital for Rehabilitation, a hospital for children who have sustained an injury and are in need of rehabilitation and for those that have the same need due to birth trauma or illness.

HOWARD I. GLAZER, PH.D.

Howard I. Glazer, Ph.D., is a Clinical Associate Professor of Psychology in Psychiatry and in Obstetrics and Gynecology at Cornell University Medical College/New York Presbyterian Hospital. He specializes in the use of electromyographic feedback (biofeedback) for the rehabilitation of pelvic floor musculature in the treatment of a broad range of urologic and gynecological conditions such as urinary stress incontinence, urge incontinence, detrusor instability, interstitial cystitis, coccydynia, prostatodynia, urethral syndrome, vulvodynia/ vestibulitis and other pelvic pain syndromes. Dr. Glazer provides individual clinical services, training workshops, and in-office specialty training. His research into the treatment of vulvodynia has been published in the Journal of Reproductive Medicine and other academic, professional and popular journals. Information on his work can be found at www.vulvodynia.com.

JOHN GRUZELIER, PH.D.

John Gruzelier, Ph.D. is Professor of Psychology at Imperial College Medical School where he heads the Department of Cognitive Neuroscience and Behaviour. His main research interests are in the relationship between psychology and brain function and the mind-body connection in health and illness. He has published 200 scientific articles in journals and books on topics such as self regulation of brain rhythms, schizophrenia and psychosis-proneness, hypnosis, stress, immune enhancement and individual differences. He has been co-editor of the International Journal of Psychophysiology since its inception in 1984 and serves on editorial boards including the Journal of Neurotherapy, the International Journal of Clinical and Experimental Hypnosis and Contemporary Hypnosis. John is a fellow of the British Psychological Society, the Royal Society of Medicine and the International Organisation of Psychophysiology; was president of the British Psychophysiology Society and vice-president of the European Federation of Psychophysiological Societies; and is a member of the Society for Psychophysiological Research, the Society for Research on Psychopathology, the British Society of Experimental and Clinical Hypnosis, and the Cognitive Neuroscience Society.

JAY GUNKELMAN, QEEGD, QEEGT

Jay Gunkelman, QEEGD, QEEGT, has been involved in the EEG field since 1972, when he co-founded the first state hospital based psychophysiology lab specializing in biofeedback. Jay has lectured on EEG since the mid 1970s, teaching at the Biofeedback Institute of San Francisco until their professional training course was sold in the mid 1980s. He is also an experienced lecturer on anatomy and neurophysiology. Jay has chaired the Annual SNR Conference since 1997 and served as SNR president in 2000-2001. With his extensive experience in EEG and qEEG, he was the first individual to receive the QEEG Technologist certification, attesting him technical competence in qEEG. He is also certified as a QEEG Diplomat. Jay is part owner of Q-Metrx.com. He provides professional consultation services from his home in the El Dorado National Forest's tiny town of Grizzly Flats, California, and lectures internationally.

DANIEL HAMIEL, PH.D.

Daniel Hamiel, Ph.D., is head of the Cognitive-Behavioral and Psychophysiological unit, Tel-Aviv Community Mental Health Center, Tel-Aviv University, Medical School. He is a clinical psychologist, certified in biofeedback (BCIA), neurofeedback, and in hypnosis (The American Society of Clinical Hypnosis). Dr. Hamiel is certified in biofeedback as a therapist and supervisor in Israel. He is past president of the Israeli Association for Applied Psychophysiology and Biofeedback. He teaches workshops on psychology and biofeedback in the USA, Europe and South America, and has taught this workshop for the American Association for Applied Psychophysiology and Biofeedback (AAPB). He was in a clinical practice in Cincinnati, Ohio from 1992-1995. Currently, Dr. Hamiel is involved in developing and performing a stress management program for students in schools in Israel and in the USA and for schools that have suffered terror attacks.

GLENN KASMAN, P.T., M.S.

Glenn Kasman, P.T., M.S. serves as Director of Physical Therapy at Good Samaritan Community Healthcare, located near Seattle, Washington, USA. He oversees department divisions for acute hospital care, inpatient and outpatient rehabilitation, work injury prevention and rehabilitation, and multiple outpatient musculoskeletal care clinics. He is also a member of the clinical faculty at the University of Washington and has been an officer for administrative and reimbursement sections of professional associations, a member of the board of the Surface EMG Society of North America, and member of other clinical advisory and editorial boards. He has published work in neurophysiology, surface EMG evaluation and feedback training, including a two-volume textbook series on uses of EMG with chronic pain, athletic injury, orthopedic rehabilitation and cumulative trauma. He lectures internationally and regularly conducts seminars for clinicians.

HENK KRAAIJENHOF, PT, BA

Henk Kraaijenhof, PT, BA is a performance consultant to international elite athletes in athletics, speed-skating, volleyball, bob sleigh, triathlon, fencing, archery, swimming, tennis, handball and soccer. He has coached individuals and teams to national success in olympic and world level competition. He is currently technical director of Nemesis BV, a company that develops and sells hi-tech training and measuring systems for sports in the Netherlands. He has published work in performance, training systems and protocols for elite athletes. He lectures internationally and has chaired and presented at international congresses in Spain, Italy, Hungary, Norway, Sweden, Belgium and Switzerland. He has conducted research in the development and application of scientific training systems for elite athletes and has been involved in scientific research projects in human sports performance in Norway, Estonia, Italy and the Netherlands.

JURI KROPOTOV, PROF. DR.

Juri Kropotov, Prof. Dr., is Director of the Laboratory for Neurobiology of Action Programming in the Institute of the Human Brain of the Russian Academy of Sciences, St. Petersburg, Russia. He graduated from the State University of St. Petersburg as a Master in Theoretical Physics and Quantum Mechanics. He also earned a Ph.D. degree (candidate of biological sciences) in physiology, and a doctorate degree in cognitive neuroscience. His scientific experience concerns neurophysiology of attention and memory, neuronal basis of attentional disorders, neurophysiological mechanisms of EEG-based biofeedback, mathematical simulation of realistic neural networks. He is the President of the Russian Organization for diagnosis and treatment of ADHD. For his research he was awarded the highest award in the former USSR - the State Prize in Science in Technology. Prof. Kropotov is an eminent scholar and author of more than 100 papers. He presently serves as President of European Chapter of the Society for Neuronal Regulation.

DONALD MOSS, PH.D.

Donald Moss, Ph.D. is managing partner, West Michigan Behavioral Health Services and Director, Chronic Pain and Headache Programs, and adjunct faculty of the Saybrook Graduate School in San Francisco. He is past president of the Association of Applied Psychophysiology and Biofeedback, editor of the Biofeedback Magazine, and consulting editor for the Journal of Neurotherapy. Dr. Moss has over 60 publications in the fields of psychophysiology, biofeedback, and behavior therapy, including an edited book (*Handbook of Mind Body Medicine for Primary Care*, Sage) in press. He has given lectures and workshops on these topics throughout the world, including recent presentations at the Association for Applied Psychophysiology and Biofeedback, the International Association for Cognitive Psychotherapy, and the World Congress of Behavioral and Cognitive Psychotherapies.

ALEXANDRA NANKE, DR. RER.NAT.

Alexandra Nanke, Dr. rer. nat. worked as clinical psychologist in a psychosomatic clinic in Germany (Medizinisch-Psychosomatische Klinik Roseneck, Prien) from 1996 to 2000. Since 2001, she has taught at the University of Marburg, Germany, in the department of Clinical Psychology and Psychotherapy. She also teaches biofeedback for the German Biofeedback Society (DGBFB). Her therapeutic experience includes cognitive-behavioral therapy and biofeedback in the treatment of psychosomatic disorders, chronic pain and anxiety disorders. In a controlled therapy study, she evaluated the effect of a biofeedback intervention in the treatment of somatoform disorders. Her current research is in the field of medically unexplained symptoms and biofeedback.

ERIK PEPER, PH.D.

Erik Peper, Ph.D., is an international authority on biofeedback and self-regulation. He is professor and director of the Institute for Holistic Healing Studies at San Francisco State University, director of Work Solutions USA, and president of the Biofeedback Foundation of Europe. He is past president of the Association for Applied Psychophysiology and Biofeedback and the Biofeedback Society of California. He received the 1982 Annual award for Excellence from the Nurse Healers Professional Associates, and the 1988 Certificate of Honor Award from the Biofeedback Society of California. He has published numerous books and research articles as well as application software programs for biofeedback. His most recent books and tapes are *Breathing for Health*, *Healthy Computing with Muscle Biofeedback* and *Make Health Happen: Training Yourself to Create Wellness*. He is the co-producer of *Healthy Computing Email Tips™*. His research interests focus on the psychophysiology of healing, autonomic self-regulation and optimum human functioning.

GABRIEL E. SELLA, M.D.

Gabriel E. Sella, MD, is an associate professor at the Faculty of Medicine, West Virginia University, Morgantown, West Virginia specialized in Family, Disability, and Occupational Medicine. He has lectured internationally in 16 countries on the subjects of soft tissue injury, disability evaluations, surface EMG and biofeedback applications in physical and behavioral medicine. He has seven fellowships and three board certifications. Dr. Sella has conducted extensive research in surface EMG applications for investigation and biofeedback treatment and the study of the range of motion and skeletal muscle injuries. He has published ten textbooks, includes *Muscles in Motion*, *Neuromuscular Testing with SEMG*, *Muscular Dynamics Graphics of Motion*, *Guidelines for Treatment with SEMG Biofeedback*, *Reference Manual for Muscular SEMG Values*, *Soft Tissue Injury – Forensic Applications*, *Myofascial Pain Syndrome*, *Facial Paralysis: Neuromuscular Re-Education with SEMG Biofeedback*, *Inclinometry*, *SEMG and Hand Dynamometry Methodologies in Clinical and Disability Medicine*. He has written 76 peer-reviewed publications and presented at 253 international meetings and seminars. His main interests are in the fields of soft tissue injury and treatment with special interest in myofascial pain.

M. BARRY STERMAN, PH.D.

M. Barry Sterman, Ph.D. is currently Professor Emeritus in the departments of Neurobiology and Biobehavioral Psychiatry at the UCLA School of Medicine. His major research interests include; basic neural mechanisms of sleep regulation; neural and behavioral mechanisms in epilepsy, neural substrates and cognitive correlates of EEG rhythms, and quantitative EEG assessment and neurotherapy. Papers written by Dr. Sterman have been published in *Science*, *Brain Research*, *EEG and Clinical Neurophysiology*, *Experimental Neurology*, *Journal of Internal Medicine*, *Biofeedback and Self-Regulation*, *Scandinavian Journal of Psychology*, *Brain Topography*, *Clinical Neurophysiology*, *Journal of Neurotherapy*, and the *Handbook of Electroencephalography and Clinical Neurophysiology*.

UTE STREHL, PH.D.

Ute Strehl, Ph.D. is an assistant professor at the Institute of Medical Psychology and Behavioral Neurobiology of the Eberhard-Karls University of Tübingen, Germany. Her ongoing research concerns the development of behavioral treatments for neurological disorders such as Epilepsy and Parkinson's Disease. She is recipient of the 1994 Neuropharmaka Award for Behavioral Research in Parkinson's Disease and, among other publications, author of a chapter on *Biofeedback of Slow-Cortical Potentials* in the newest edition of the well known *Biofeedback: A Practitioner's Guide*, edited by Schwartz & Andrasik.

LYNDA THOMPSON, PH.D.

Lynda Thompson, Ph.D. is a psychologist with experience in teaching, clinical psychology and school psychology. Dr. Thompson became Executive Director of the ADD Center in Toronto, Canada in 1993. Her doctoral dissertation (1979) dealt with hyperactive children treated with methylphenidate. She is co-author with William Sears M.D. of the A.D.D. book : *New Understandings, New Approaches to Parenting your child*.

MICHAEL THOMPSON, M.D.

Michael Thompson, M.D., is a retired physician and was associate professor, University of Western Ontario, head of post-graduate education in psychiatry, examiner for the Royal College of Physicians (Canada) and chairman of their examinations committee in psychiatry. Numerous professional publications include, *A Resident's Guide to Psychiatric Education*. While associate professor at the University of Toronto, he was psychiatric consultant to the Hospital for Sick Children's neurology department.

VIETTA S. WILSON, PH.D.

Vietta S. Wilson, Ph.D., works at the York University, Toronto, Ontario, Canada, has 25 years of education and 25 years of clinical experience in Canada and the United States. She has worked since 1971 in sports (Olympic performers from archery to yachting), education (elementary to university), medicine (cerebral palsy clinic), psychology (Atkinson Counseling Centre) and business (president of stress management company). She teaches sport psychology, counseling and biofeedback assisted self-regulation courses at the graduate and undergraduate level. Her current research is topographical EEG brain mapping of visual and kinesthetic imagery.

BABCP

**BRITISH ASSOCIATION FOR
BEHAVIOURAL & COGNITIVE
PSYCHOTHERAPIES**

Registered Charity No 273528

The BABCP is the lead organisation for Cognitive Behaviour Therapy within the UK. Membership has built up over 30 years to more than 4,800 members in UK and worldwide and continues to increase by more than 10% annually. BABCP is a multidisciplinary interest group for people involved in the practice and theory of CBT and all members of the helping professions are welcome to join including Clinical Psychologists, Educational/Forensic and other Psychologists, Nurses, Psychiatrists, Counsellors, Social Workers, Researchers & Academics, Occupational Therapists, Medical Practitioners and Teachers

Membership includes receipt of a respected academic Journal - "Behavioural & Cognitive Psychotherapy", published quarterly by Cambridge University Press and a Newsletter containing news about the Association. There are also preferential rates for academic journals, workshops and conferences, and access to a wide range of information disseminated by the organisation on areas of interest. Money is raised for a Research Fund to which members may eventually apply for research grants. Members can have access through the Internet website to an increasing variety of services through BABCP.

As well as the Nationally organised Annual Conference and regular Workshops, the Association is based around regional and special interest groups which organise their own events. Members receive information about these and have free membership of any they choose. BABCP members are automatically members of the European Association of Behavioural and Cognitive Therapies (EABCT).

Accreditation as a Cognitive/Behavioural Psychotherapist is available to UK members who meet additional criteria. Accreditation through BABCP entitles members to Registration with the Behavioural & Cognitive Psychotherapy Section of the United Kingdom Council for Psychotherapy (UKCP).

Annual membership costs as little as €55 (£35) for UK & Irish members and €65 (£43) for overseas members. Students and trainees pay only half this. Fuller details and application forms are available via the website: www.babcp.com

Contact via email: info@babcp.com tel: +44 1254 875277 or

Write: BABCP, PO Box 9, Accrington, UK, BB5 0XB

IMPORTANT NOTE:

The workshop descriptions in this section are written in Italian and English, but the actual workshops will be presented in Italian only. Crediti ECM Rishiesti.

IL BIOFEEDBACK NELLA RIEDUCAZIONE MOTORIA DEL SOGGETTO EMIPLEGICO AFFETTO DA ESITI DI STROKE - 2 ORE

Nino Basaglia, M.D.

Vengono richiamati i principi teorici in base ai quali si utilizzano dispositivi di Biofeedback (BFB) nella rieducazione motoria del soggetto emiplegico, soffermandosi in particolare sul ruolo della "conoscenza del risultato" come elemento cardine nel facilitare il processo di apprendimento di nuove abilità motorie. Vengono prese in considerazione le principali tipologie di dispositivi di BFB utilizzabili, in particolare: il BFB-EMG, il BFB goniometrico e il BFB di pressione-carico. Verranno presentati una serie di esercizi base per ogni tipologia di dispositivo indicato. (2-hour course only in Italian)

USE OF BIOFEEDBACK IN MOTOR REHABILITATION OF PEOPLE WITH HEMIPLEGIA AFTER STROKE – 2 HOURS

This course looks at the theoretical principles upon which biofeedback (BFB) devices are used in motor rehabilitation of hemiplegic patients. Particular emphasis is placed on the role of the "knowledge of the result" as a fundamental factor in order to facilitate the learning process of new motor abilities. The main typologies of BFB devices used for this are taken into consideration, in particular: surface electromyography biofeedback (SEMG BFB), goniometric BFB and pressure-load BFB. A series of basic exercises for each type of device that has been pointed out are presented.

BIOFEEDBACK IN THE DIAGNOSIS AND TREATMENT OF PELVIC FLOOR DYSFUNCTION – 3 ORE

Paolo Di Benedetto, M.D.

Negli ultimi anni si sono registrate numerose applicazioni del biofeedback nelle patologie uroginecologiche e nelle disfunzioni del pavimento pelvico. Questo corso della durata di 3 ore descrive l'importanza del biofeedback nella diagnosi della scarsa coscienza delle funzioni del pavimento pelvico, dell'ipotono, dell'ipertono e della insufficienza muscolare del pavimento pelvico, e principalmente, nella dissinergia di questi muscoli rispetto ad altri gruppi muscolari. Il biofeedback, specificatamente, incrementa i risultati ottenuti dalla paziente con la rieducazione dei muscoli perineali, attraverso il rilassamento dell'ipertono muscolare e la dimostrazione dell'effettiva efficacia nel controllo vescico-sfinterico. Nel corso saranno illustrate le numerose applicazioni del biofeedback: incontinenza urinaria, vescica iperattiva, pattern dissinergici nello svuotamento vescicale, la stipsi ed il dolore pelvico cronico.

BIOFEEDBACK IN THE DIAGNOSIS AND TREATMENT OF PELVIC FLOOR DYSFUNCTION – 3 HOURS

In recent years, biofeedback has become accepted for several applications for urogynaecological conditions and pelvic floor dysfunction. This 3-hour course describes how biofeedback is important in diagnosing low awareness of the pelvic floor area, hypotonia or hypertonia and weakness of the pelvic floor muscles, and mainly, dyssynergia of these muscles versus other muscular groups. But biofeedback specifically improves patient's outcomes by re-educating weak pelvic floor muscles, relaxing pelvic floor hypertonia and demonstrating effective muscle activity to control bladder and sphincter dysfunction. The many applications for biofeedback treatment are touched on in the course including: urinary incontinence, overactive bladder, dyssynergic patterns of voiding, constipation, and chronic pelvic pain.

NUOVE FRONTIERE NELLA EMG DI SUPERFICIE – 6 ORE

Roberto Merletti, Prof. Eng.

Il corso illustrerà i concetti fondamentali della fisiologia e della biofisica nell'elettromiografia di superficie e le raccomandazioni proposte dall' European Concerted Action on Surface EMG for Non Invasive Assessment of Muscles (SENIAM). Inoltre verranno illustrate le innovazioni e gli sviluppi riguardanti i tipi di elettrodi, le tecniche di estrazione e di elaborazione del segnale, il monitoraggio monodimensionale e bidimensionale degli elettrodi, la scomposizione del segnale dell'EMG di superficie. Verranno riportati i risultati preliminari dell' European Projects NEW (Neuromuscular assessment in the Elderly Worker) e dell'OASIS (On Asymmetry in Sphincters).

NEW FRONTIERS IN SURFACE EMG – 6 HOURS

This 1-day (6-hour) workshop will illustrate the basic concepts of physiology and biophysics of surface EMG generation and the recommendations proposed by the European Concerted Action on Surface EMG for Non Invasive Assessment of Muscles (SENIAM). In addition, it will illustrate recent findings and developments concerning electrode types, techniques for information extraction, crosstalk reduction, single motor unit monitoring using uni-dimensional and bi-dimensional electrode arrays, and decomposition of surface EMG. Preliminary results of the European Projects NEW (Neuromuscular assessment in the Elderly Worker) and OASIS (On Asymmetry in Sphincters) will be reported.

PRINCIPI DI MISURE MECCANICHE NELLA DIAGNOSTICA – 12 ORE

Paolo B. Pascolo, Prof. Eng.

Il sistema uomo inteso come "macchina" è stato oggetto di numerose ricerche.

Il corso si prefigge di concentrarsi sulle metodiche più idonee per affrontare una descrizione di tipo numerico e funzionale dei vari distretti e sottosistemi che compongono il sistema uomo, sottosistemi schematizzabili in ambito meccanico applicato e specificamente in ambito biomeccanico.

Verrà rivolta particolare attenzione agli aspetti metodologici: se è vero che nel caso di soggetti sani è sufficientemente semplice procedere a delle standardizzazioni, nei soggetti disabili le variabili in gioco vengono esaltate dalla disabilità stessa e perciò risulta necessario impostare delle metodologie "adattate".

Per poter implementare le procedure di indagine biomeccanica di tipo "adattato" è necessario procedere il più possibile correttamente dal punto di vista metodologico.

Il corso della durata di 14 ore, si prefigge di:

- concentrare una prima parte delle lezioni sulla teoria delle misure;
- presentare gli strumenti più idonei per ottenere delle misure affidabili;
- descrivere un piano metodico per affrontare un problema di misure ed istituire set sperimentali in ambito di biofeedback; presentare una serie di indagini sperimentali effettuate in laboratorio, al fine di dare praticità ai contenuti teorici del corso.

PRINCIPLES OF MECHANICAL MEASURES IN DIAGNOSIS – 12 HOURS

The human system as "machine" has been the object of numerous research. This course describes an improved method to describe the various parts and subsystems of the human system using numerical and functional descriptions, based on mechanics and biomechanics. Particular attention will be given to the adjust and adapt the methodological aspects for healthy and disabled subjects in order to standardize the variables used. The workshop will show the necessity to proceed correctly, from the methodological point of view, in order to implement investigation adapted to biomechanical procedures. Specifically, the course describes:

- to assemble a first part of the lessons on the theory of measures;
- to introduce the most appropriate tools to get reliable measures;
- a methodical plan for experiments with biofeedback;
- a series of hands-on experiments to apply the theoretical contents of the course.

IL BIOFEEDBACK IN PSICOLOGIA: LA RICERCA E LE APPLICAZIONI CLINICHE – 2 ORE

Giovanna Pelamatti, Prof.

Nella lezione verrà considerata la contestualizzazione teorica del biofeedback in psicologia, con riferimenti specifici al behaviorismo, alla teoria dei sistemi, nonché alle teorie sull'apprendimento degli indici fisiologici. Di seguito verranno considerate le applicazioni sperimentali e cliniche della tecnica del biofeedback in psicologia e negli ambiti dello sport e dell'handicap.

BIOFEEDBACK IN PSYCHOLOGY: RESEARCH AND CLINICAL APPLICATIONS – 2 HOURS

AP-

This course covers the theoretical environment of biofeedback in psychology, with specific references to behaviorism, systems theory, and theories on the learning of physiological indexes. The course builds on the theory with experimental and clinical applications of biofeedback in psychology, sports and rehabilitation.

IL BIOFEEDBACK NEL TRATTAMENTO DELLE LESIONI DEL NERVO FACCIALE – 2 ORE

Marsilio Saccavini, M.D. & Emiliana Bizzarini, M.D.

L'obiettivo di questa lezione risiede nella definizione della riorganizzazione del controllo del movimento. L'uso del biofeedback risulta prioritario nel trattamento riabilitativo finalizzato al ripristino del controllo motorio nei quadri a genesi traumatica e non-traumatica nonché negli esiti di riparo chirurgico. La lezione è organizzata in una prima parte teorica ed una seconda parte pratica.

BIOFEEDBACK THERAPY IN FACIAL NERVE LESIONS – 2 HOURS

This course covers the reorganization of the control of movement in facial nerve injury. The use of biofeedback is a priority in the restoration of movement in the post-traumatic and non-traumatic etiology and also in the surgical approach. The course first covers the theoretical aspects and is then followed by a practical session.

BIOFEEDBACK, EQUILIBRIO E REAZIONI POSTURALI – 2 ORE

Luigi Tesio, M.D.

Lo studio delle reazioni posturali e di equilibrio riconosce nell'utilizzo del SEMG associata all'analisi del gomito posturografico uno degli elementi prioritari. La possibilità di controllare i fenomeni destabilizzanti posturali con il feedback acustici e visivi rientra nel piano terapeutico nei disturbi dell'equilibrio. L'obiettivo del corso risiede nell'illustrazione delle tecnologie sopracitate e nell'utilizzo pratico delle stesse.

BIOFEEDBACK, BALANCE AND POSTURAL REACTIONS

This course covers the study of postural reactions and equilibrium in the use of the SEMG for the analysis of postural trajectory. The ability to check the postural destabilizing phenomenon with acoustic and visual feedback is introduced into the therapeutic plan in the equilibrium's pathologies. The objective of the course is to illustrate these technologies and provide hands-on practice in their use.

NINO BASAGLIA, M.D.

Nino Basaglia, M.D. is the Director of Rehabilitation Medicine Department at the Hospital of Ferrara. He is a Certified Specialist in Neurology, Ferrara, Italy (1984) and Certified Specialist in Geriatrics, Florence, Italy (1979). Dr. Basaglia is the Editor-in-Chief of the Italian Journal of Physical and Rehabilitation Medicine and has published more than 250 articles in scientific journals. He is the author of 11 books, including *La riabilitazione del grave traumatizzato cranico* (Masson Ed, Milan, 1994) and *Trattato di Medicina Riabilitativa* (Idelson-Gnocchi, Napoli, 2000).

EMILIANA BIZZARINI, M.D.

Emiliana Bizzarini, M.D., graduated in Medicine and Surgery from the University Udine in 1995. Since 1999 Dr. Bizzarini has specialized in Sports Medicine and is responsible for Sports Medicine for disabled athletes in the Institute of Physical Medicine and Rehabilitation in Udine. Since 2001, Dr. Bizzarini has also held a position with the Italian Disabled Sports Federation (FISD), and is currently dealing with the functional evaluation of athletes with post neurological or orthopaedic injury and with ergonometry in neuro-rehabilitation.

PAOLO DI BENEDETTO, M.D.

Paolo Di Benedetto, M.D., graduated in Medicine and Surgery at the University of the Studies of Trieste in 1973, expert in Physical Medicine and Rehabilitation from 1975 and in Neurology from 1980. From September 1988 to December 2001, he was chief physician of Physical Medicine and Rehabilitation at the Trieste Hospital; and, from January 1999, coordinator of the Horizontal Neuro-Rehabilitation Department Inter-Hospital in Friuli-Venezia-Giulia. Since January, 2002, he has been manager of the Department of Rehabilitation Medicine of the Institute of Physical Medicine and Rehabilitation of Udine. He is a member of numerous scientific societies and is currently the president of the Italian Urodynamics Society. Since 1995 he has been editor-in-chief, of the official magazine of the Italian Society of Physical Medicine and Rehabilitation: *Europa Medicophysica*. He has published over 300 articles in national and international magazines, and a number of monographs.

ROBERTO MERLETTI, PROF. ENG.

Prof. Eng. R. Merletti obtained an MS and PhD from The Ohio State University in Biomedical Engineering and is a recognized authority in the field of EMG and Engineering of the Neuromuscular System. In these fields he coordinates international research projects supported by the European Community and the European Space Agency. He was Professor of Biomedical Instrumentation and Biomedical Signal Processing at Boston University and was affiliated to the NeuroMuscular Research Center in Boston from 1989 to 1994. He is professor of Biomedical Engineering at Politecnico in Turin, where he is Director of the Laboratory for Engineering of the Neuromuscular System, and associate editor of the *Journal of Electromyography and Kinesiology*, of the *IEEE Transactions on Biomedical Engineering* and of the *IEEE Transactions on Neural Systems and Rehabilitation Engineering*. He is author/co-author of over 50 publications in international journals and editor, with Prof. P. Parker, of the IEEE book *Electromyography: Physiology, Engineering and Non-Invasive Applications*.

PAOLO PASCOLO, PROF. ENG.

Prof. Eng. Paolo Pascolo, graduated in Electrical Engineering at the University of Pavia, Faculty of Engineering. He completed his studies as an Expert of Industrial Design at the Polytechnic in Milan, and Sciences of the Constructions and Dynamics of the Structures at the University of the Studies of Udine. Since 1978, he has taught as professor of Applied Mechanics for Machines at the University of Trieste and Construction Sciences at the University of Udine. He is an electronic and computer systems analyst and currently manages the department of Bioengineering (section APT) of the International Center of Mechanical Sciences (CISM) of Udine. Prof. Pascolo is the author of publications in the field of mechanics, biomechanics, the mechanics of vibrations, fluids, construction science and computer science. He is coordinator of studies on the mechanics of locomotion, physiology and pathology and heads up the working group on sensors at the University of Udine.

GIOVANNA PELAMATTI, PROF.

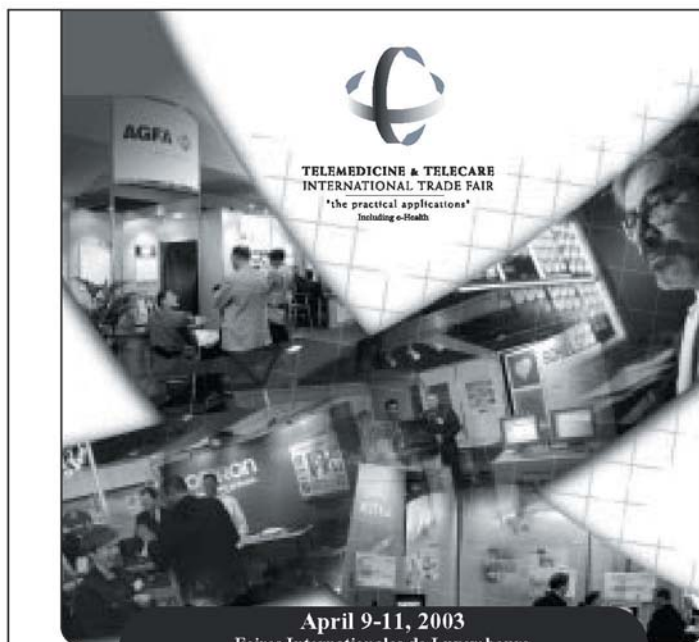
Prof. Giovanna Pelamatti is a teacher in the Faculty of Psychology at the University of Trieste. She teaches Physiological Psychology and Neuropsychology of Development. Prof. Pelamatti is involved in research on cognitive trials.

MARSILIO SACCAVINI, M.D.

Marsilio Saccavini, M.D. graduated in Medicine and Surgery at the University of Trieste in 1983, and completed further studies in Physical Medicine and Rehabilitation in 1992. Dr. Saccavini heads up the Functional area of Biomechanics for the Institute of Physical Medicine and Rehabilitation Gervasutta in Udine. He is jointly responsible for the Laboratory of Clinical and Functional Bio-engineering with the Department of Civil Engineering. His research interests include instrumental verification of the normal and pathological gesture and methodology of the rehabilitation program. His current focus is on ergometry in neuro-rehabilitation, the kinematics and the dynamics of the gait analysis and wheelchair propulsion.

LUIGI TESIO, M.D.

Luigi Tesio M.D. is currently the chief physician of the Division of Recovery and Functional Re-education in Pavia and manager of the Department of Neuromotor Rehabilitation Medicine, IRCCS Foundation Maugeri. His research experience from 1975-1982 includes research in human physiology (spine physiology in the cat; locomotion biomechanics); and in bioengineering (multifactorial analysis of the human locomotion). He has specific experience in the analysis of movement: neural control of the development of muscular tension in the cat, ergometric analysis of the normal and pathological human locomotion; analysis dynamometrical / EMG / telemetric kinematics of the locomotion; dynamic posturography. He also has clinical experience in neurology and psychiatry.



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SCIENTIFIC MEETING

The scientific program starts at 5:30 p.m. on Wednesday evening, February 19th and runs to 8:30 p.m. The program continues all day Thursday, February 20th starting at 8:00 a.m. and ending at 5:00 p.m. with an hour break for lunch from 12:30 p.m. to 1:30 p.m. The Scientific program closes on Friday, February 21st with the morning closing ceremonies from 9:00 a.m. to 10:00 a.m.

The scientific program is open to participants of all tracks. Plenary sessions will be held in the auditorium at the Physical Medicine and Rehabilitation Institute (*Gervasutta* Hospital), Udine. To submit your proposal for symposia, lectures, paper sessions, oral presentations, poster presentations, short courses or evening panels please go to <http://www.bfe.org/prien.html>, where you can download the necessary documents.

IMPORTANT NOTE: NOVEMBER 18TH IS THE DEADLINE FOR SUBMITTING SYMPOSIA, LECTURES, PAPER SESSIONS, ORAL PRESENTATIONS AND POSTER PRESENTATIONS

Presentation topics will include virtually every aspect of biofeedback from the latest research to clinical practice. The official language of the program is English. The program Co-chairs are:

Paolo Di Benedetto, M.D.
Physical Medicine and Rehabilitation
Institute *Gervasutta* Udine, (Italy)

Gabriel E. Sella, M.D.
Ohio Valley Disability Institute
Martin's Ferry, Ohio USA

The BFE meeting is co-sponsored by:

- Association for Applied Psychophysiology & Biofeedback (AAPB) – International Section
- Associazione de Riabilitazione del Friuli-Venezia Giulia (ART)
- International Stress Management Association (ISMA) – Netherlands
- Israeli Association for Applied Psychophysiology and Biofeedback (IAPB)
- Gesellschaft für Internationales Stressmanagement & Biofeedback Coaching

A general call for papers has been issued by the BFE and the E-SNR. Part of the Scientific Program will be a panel discussion involving Barry Sterman, Juri Kropotov and other presenters on the theme: *Application of the ERD/ERS Approach in EEG Biofeedback Training*. Further suggestions will follow. For more information on the lecturers please contact the BFE or E-SNR.

Organizing Committee of the E-SNR Inaugural Meeting:

Juri D. Kropotov, Ph.D., Russia
Jonelle Villar, M.A., Norway
Patricia Bellinghausen, Dipl-Psych, Portugal

KEYNOTE SPEAKERS (ALPHABETICAL ORDER)

We are pleased to announce the keynote speakers of the 7th Annual BFE Meeting & E-SNR Inaugural Meeting. Together, these three speakers offer a wealth of knowledge in electroencephalography (EEG) and surface electromyography (SEMG).

Stuart Donaldson, Ph.D., EMTA, BCFE, ABDA, is director of Myosymmetries Calgary, Canada. Dr. Donaldson has published a number of articles in respected journals and in 1995 was awarded the American Journal of Pain Management's award for the outstanding Contribution to the Interdisciplinary Pain Management Literature for that year. The title for Dr. Donaldson's address is: *Fibromyalgia: A Complex Neurological Problem Involving the Musculoskeletal and Central Nervous System*.

Dr. Joe Kamiya, Ph.D., has served as a leader in the field of EEG biofeedback for three decades. Now retired from formal academic endeavors he held positions at the University of California, San Francisco and as a visiting professor at several institutions including Kagawa University, Tokyo, Max Planck Institute for Psychiatry, Munich, and University of Hawaii, Honolulu, and contributed to the NASA Spacelab J Payload aboard Endeavor.

Wolfgang Klimesch, Ph.D., is Professor of Psychology at the Department of Physiological Psychology in the University of Salzburg, Austria. Prof. Klimesch is internationally recognised for his research, which has focused on the relationship between oscillatory components in the EEG – particularly the alpha and theta activities – and cognitive processes, such as memory and attention. His work has been published in journals such as *Clinical Neurophysiology*, *Brain Topography*, *International Journal of Psychophysiology*, *Psychophysiology* and *Neuroreport*. E-SNR's keynote lecturer Wolfgang Klimesch will hold a keynote lecture on the subject of *Memory, Cognitive Performance and EEG Frequencies in the Theta and Alpha Range*.

CONTINUING EDUCATION CREDITS



For the BFE meeting Italian ECM credits have already been requested from the Italian Health Office. Also, some of the courses being offered have been approved for accreditation from the Biofeedback Certification Institute of America (BCIA) to provide Category A, accredited continuing education credit for BCIA recertification.

EXHIBITORS

Space is available for a limited number of corporate exhibitors for 3-days during the conference. The exhibition area opens on Wednesday evening at 5:00 p.m. and is open all day Thursday and Friday from 9:00 a.m. to 5:00 p.m. Space is also available for a limited number of non-profit exhibitors.

EFORT 2003

**6th Congress of the European Federation
of National Associations of Orthopaedics and Traumatology**
June 4-10, 2003, Helsinki, Finland



Programme

Following type of sessions will be organized:

- Instructional Course Lectures
- Scientific Symposia
- Free Papers
- Scientific Posters
- Video Presentations
- Technical Exhibits

■ Pre-congress of European Orthopedic Research Society will be organized
■ Specialty Societies are invited to join the Specialty Day

For more information please see the website of the congress.

Important dates

Deadline for abstracts	September 30, 2002
Deadline for early registration	January 31, 2003

Contact information

Congress Secretariat
CONGREX / Blue & White Conferences Oy
Street address: Sulkapolku 3, 3rd floor
P.O. Box 81, FIN-00371 Helsinki
Tel: +358-9-560 7500
Fax: +358-9-560 75020
E-mail: efort2003@congrex.fi

www.congrex.fi/efort2003

ACCOMMODATIONS – HOTELS

A number of rooms have been reserved at special rates at three (3) hotels in the center of Udine. All hotels are only a short distance from the *Gervasutta*, the Physical Medicine and Rehabilitation Institute at prices to suit every taste. Rates vary from €44,00 to €95,00 per single room, per night, and from €87,00 to €140,00 for a double room per night. Prices include taxes and breakfast.

To book accommodations, please contact the hotel of your choice and tell them that you are part of the BFE conference group. Please book accommodations as soon as possible as the availability of rooms offered at special prices is limited. Please contact the hotel if you require information on special services at the hotel.

The Astoria Hotel Italia	Single Room:	€95,00	€90,00
P.za XX Settembre, 24	Double as Single:	€110,00	€105,00
Tel: 0432 505091	Double Room:	€145,00	€130,00
Fax: 0432 509070			

Contacts: Mr. Battistutto Vittorio or Francesca – Reception

Web site: www.hotelastoria.udine.it

Email: astoria@hotelastoria.udine.it

** Prices in first column are from Monday to Thursday and in second column for Friday to Sunday.*

The Four Star Astoria Hotel Italia has a long-established tradition of high-quality service and satisfies both the tourist and the most demanding business professional. It is well situated in an elegant building in the historic centre of town. The hotel is easily reached from the railway station and is less than 2km from *Gervasutta*. Years of experience in the field of hospitality together with the professionalism of its staff make the Astoria Hotel Italia the reference point for all those who look for high comfort, elegance and convenience.

Hotel Friuli	Single Room:	Not Available
V. le Ledra, 24	Double used as Single	€69,00
Tel: 0432 234351	Double Room:	€98,00
Fax: 0432 234606		
friuli@hotelfriuli.udine.it		
Contacts: Mr. Stefano Polano, Anna		
www.hotelfriuli.udine.it		





A few steps away from the historic centre of Udine and easily reached from the main roads, Hotel Friuli offers a high level of hospitality, that combines a modern environment with quality. Wide and functional spaces, polite and well-trained staff are the main characteristics of this 3-star hotel, that offers a quality stay to satisfy the needs of its guests. Ample parking, restaurant, bar, room service, dry cleaning and laundry service, valuables deposit, fax and copying services are all available.

The Hotel President
Via Duino, 8
Tel: 0432 509905
Fax: 0432 507287
Contact Person: Pierluigi Saccavino
prenotazioni@hotelpresidentud.com
www.hotelpresident-ud.com or www.hotelpresident.tv

Single Room:	€44,00
Double used as Single:	€50,00
Double Room:	€75,00

The Hotel President has been recently modernized and is situated only 700 metres from the historic Old Town centre of Udine. The hotel can easily be reached from the Railway Station and from the main roads leading to the city. It is a modern Hotel with American Bar. All 80 rooms are furnished with private bathroom, telephone, PC connection plug, Pay-TV, Sat-TV and mini-bar. There is a small restaurant in the hotel (max for 15 persons).

In collaborazione con:

 <p>La prima Banca austriaca in Italia Viale Venezia, 100 - Tel. +39.0432.532688 Via Mercatovecchio, 3 - Tel. +39.0432.585911</p>	 <p>Hotel Friuli 33100 UDINE/ITALIA - Viale Lezna, 24 Tel. 0432/234351-2-3-4 - Fax 0432/234606</p>	 <p><i>Astoria Hotel Italia</i> ***** <i>Ristorante Astoria Italia</i> 33100 UDINE/ITALIA - Piazza XX Settembre, 24 Tel. 0432/505091 - Fax 0432/509070</p>	 <p>CENTRO CONGRESSI UDINE Palazzo Antivari Kechler 33100 UDINE/ITALIA - Piazza XX Settembre, 14 Tel. 0432/26117 - Fax 0432/509070</p>
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Workshop Registration Form

Fax to (31) 20 44 22 632

Personal Information

Family Name:		Initials:
Organization:		Title/Degrees:
Address		Tel:
City / Country		Fax:
Postal Code		Email:

Method of Payment

Money Transfer <input type="checkbox"/>	Cheque <input type="checkbox"/>	Visa <input type="checkbox"/>
<i>Please indicate your name and address clearly on all money transfers</i>		Name of Cardholder:
		Card Number: _____ Exp Date: _____
		Cardholder Signature
Bank charges (cheque/VISA):	We have to add €7,00 for payments with cheques	We have to add 5% of the total amount for payments with VISA card

CHOICE OF WORKSHOPS

Dates Covered	Tracks	€
<input type="checkbox"/> Feb. 18 – Feb. 22	EMG TRACK* – includes 4 days of workshops on SEMG and admittance to the scientific program on day three.	550
<input type="checkbox"/> Feb. 18 – Feb. 22	EEG TRACK* – includes 4-days of workshops on EEG and admittance to the scientific program on day three.	650
<input type="checkbox"/> Feb. 18 – Feb. 22	OPEN TRACK* – includes 4 days of workshops of your choice and admittance to the scientific program on day three.	600
<input type="checkbox"/> Feb. 18 – Feb. 22	ITALIAN TRACK* – includes 4 days of workshops in italian and admittance to the scientific program on day three.	550
Tues, Feb 18 th Wed, Feb 19 th Friday, Feb 21 st Sat, February 22 nd	My selection of 4 workshops: _____ _____ _____ _____	

*Co-sponsor members receive a 10% discount. Students receive special prices, see registration info.

Dates Covered	Scientific Program plus one 2-day or two, 1-day workshops	€
<input type="checkbox"/> Tues-Wednesday Feb 18 th & 19 th	My selection of 1 or 2 workshops is:	450
<input type="checkbox"/> Friday-Saturday Feb 20 th & 21 st	My selection of 1 or 2 workshops is:	450
Dates Covered	Scientific Program plus one, 1-day or 2-day workshop	€
<input type="checkbox"/> Feb. 20 th	1-day Scientific Program	150
<input type="checkbox"/> Feb. 18 – Feb. 22	My 2-day workshop is:	300
<input type="checkbox"/> Feb. 18 – Feb. 22	My 1-day workshop is:	150

REGISTRATION FEE

	EEG Track	EMG Track	Open Track	Italian Track
Entire conference*	€ 650,00	€ 550,00	€ 600,00	€ 550,00
Co-sponsor members	€ 585,00	€ 495,00	€ 540,00	€ 495,00
Students**	€ 250,00	€ 200,00	€ 225,00	€ 200,00
Scientific program + 2-days	€ 450,00	€ 450,00	€ 450,00	€ 450,00
Scientific program only	€ 150,00	€ 150,00	€ 150,00	€ 150,00
Single, two-day workshop	€ 300,00	€ 300,00	€ 350,00	€ 300,00
Single, one-day workshop	€ 150,00	€ 150,00	€ 150,00	€ 150,00

*The registration fee for the entire conference includes:

- Official Opening Ceremonies
- Welcome Reception
- Official Closing Ceremonies
- Mid-session refreshments
- Conference materials including the final program and abstracts
- Admission to all Scientific Sessions and Posters.
- Possibility to obtain Special BFE Delegate Rates for Hotel accommodations
- 50% on the price of the gala dinner party on Friday, February 21st

Please note: the registration fee does not include lunch on any conference day. Information on lunch options in the surrounding area will be available in your on-site registration pack.

** Student registrations must be accompanied by a letter from their Head of Department confirming student status.

PAYMENT

Registration fees are payable in advance of the conference by money transfer, cheque or credit card (VISA). Please indicate your name and address clearly on all money transfers. We have to add a 7,00 for payment by cheque, and 5% of the total amount for payments with VISA card. All payments are to be sent to:

Danielle Matto, Executive Director
 Biofeedback Foundation of Europe
 P.O. Box 75416
 1070 AK Amsterdam
 The Netherlands
 Tel: (31) 20 44 22 631 Fax: (31) 20 44 22 632

CANCELLATIONS

If you need to change the name of a registrant or cancel the registration completely, please notify the BFE immediately. Provided written notice is received by January 17, 2003, a full refund will be given less a 10% administration charge. It is regretted that for cancellations after January 17, 2003, or for no-shows at the conference, there are no refunds. The BFE reserves the right to change any session in the final program or cancel a course. If a course is cancelled, you will be offered a place in another course of your choice or a full refund for that course.

SCHOLARSHIP REQUESTS

The BFE makes available a limited number of scholarships for students and qualified individuals that wish to attend the conference and workshops and would otherwise be unable to do so. These scholarships permit attendance at the scientific program at no charge and reduce the cost to attend any of the workshops. To submit a request for a scholarship, simply complete the registration form with a reason for the reduction in fee. A committee will decide on all received applications. Applicants will be notified of the decision, after all applications have been reviewed.

**CONTACT US FOR INFORMATION ON
NEXT YEAR'S CONFERENCE**

Biofeedback Foundation of Europe

P.O. Box 75416 AK Amsterdam

The Netherlands

Tel: (31) 20 44 22 631

Fax: (31) 20 44 22 632

<http://www.bfe.org>

Workshop Information

workshops@bfe.org