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## European Chapter of the Society for Neuronal Regulation

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# European Chapter of the Society for Neuronal Regulation

The Society for Neuronal Regulation is truly becoming an international organization. Europeans who attended the 9th annual SNR conference in Monterey, California, October 27-30, 2001 were encouraged by former SNR President, Jay Gunkelman, to form an initiative group to create a European chapter. The group elected the first Board of the European SNR: President, Juri D. Kropotov, Institute of the Human Brain, St. Petersburg, Russia; Secretary, Jonelle Villar, Ulvik Neurofeedback Center, Ulvik, Norway; and Treasurer, Patricia Bellinghausen, Centro de Neurofeedback de Lisboa, Lisbon, Portugal.

The initial goals of the European chapter were formulated as follows:

- Standardization of procedures and protocols.
- Basic research orientation which would support EEG biofeedback; initiation of European multiple center studies on application of neurofeedback for treatment of ADHD, dyslexia, addictions, dementia, etc.
- Provision of supervision for practitioners, publishing a textbook on Basic Principles of Neuronal Regulation, organizing workshops and seminars on Neurofeedback.
- Standardization of the certification procedure, organizing a European Neurofeedback Certification Institute.
- Promoting the field of neuronal self-regulation as an effective treatment for brain dysfunctions by writing newspaper articles, organizing radio and TV programs.
- Creating a website for the European SNR.
- Networking among members of the group.
- Networking with other health care professionals (i.e., national professional psychological organizations) to promote the European chapter of SNR.

Journal of Neurotherapy, Vol. 6(3) 2002 Copyright © 2002 ISNR. All rights reserved. In February 2002 Board members of the European chapter attended the 6th annual meeting of the Biofeedback Foundation of Europe (BFE) held in Amsterdam at Vrije Universiteit Teaching Hospital. A presentation was given by the Board to introduce the European chapter. Not only were 30 neurofeedback scientists and practitioners in attendance, but past and present SNR Board members, Dr. Joel Lubar, Judith Lubar and Dr. Barry Sterman. It was a valuable contribution to the meeting to have this support from the American SNR members. Above all, it was encouraging to see the display of enthusiasm and curiosity, both for our newly formed chapter as well as for the growing field of neuronal regulation.

One of the goals of this meeting was to encourage attendees to work together with the Board to discuss their thoughts and needs pertaining to what the Society could offer them. Concern was expressed that the Society should be inclusive thereby allowing for the multi-disciplinary nature of the backgrounds of people involved in neurofeedback in Europe. This variety reflects the interest for EEG-biofeedback arising from many fields and disciplines.

The history of EEG-based biofeedback in Europe has certain specific features which differ from those in the American and Australian chapters. In the 1970s and 1980s the trend in European electrophysiology moved towards so-called DC or slow potential recordings. This trend was inspired by the discovery in the 1960s of Contingent Negative Variation (CNV) by the famous English neurophysiologist Gray Walter and was supported by sophisticated methodological work by Herbert Bauer and Brigitte Rockstroh in Vienna and Tübingen. The trend later expressed itself in two practical applications applied by Giselher Guttmann, Niels Birbaumer, and John Gruzelier: (a) in slow potential biofeedback used for peak performance and for treatment of seizure disorders and schizophrenia, and (b) in a brain-computer interface based on self-regulation of slow cortical potentials.

At the same time, in the 1970s, Gert Pfurtscheller and Wolfgang Klimesch re-discovered the method of computing event related desynchronization, the phenomenon known since Hans Berger, and inspired practical applications of this method in the fields of neurotherapy, peak performance and brain-computer interface. The slow potential self-regulation and voluntary regulation of alpha desynchronization are associated with different neuronal mechanisms and are considered as complimentary approaches in neuronal regulation.

In the former Soviet Union strong Pavlovian traditions in psychophysiology formed the foundation Nikolai Vasilevski and Natalia

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Bechtereva used for application of EEG-based biofeedback technology for training Soviet sportsmen, astronauts, and people surviving in severe climate conditions such as Antarctica and the North Pole. These traditions continue to develop in studies of the neurophysiological basis of neurofeedback currently being performed in the Institute of the Human Brain of the Russian Academy of Sciences in St. Petersburg.

Since the meeting in Amsterdam, the Board of the European chapter for the Society for Neuronal Regulation has addressed the need for further education and training. We have the pleasure of announcing a four-day course to be held late September in Lisbon entitled The Neurophysiological Basis of Neurotherapy: Theory and Practice presented by Juri Kropotov and Jay Gunkelman. During the next year we will also be working together with the BFE to develop the EEG track of their 7th annual meeting planned for February 2003 in Udine, Italy.

Thank you SNR, for your vision in promoting the European chapter!

Juri D. Kropotov, PhD President, SNR European Chapter