MÄLARDALEN UNIVERSITY SWEDEN

Institute for Coperaton in ICALM Advancement of Lifesstyle Medicine

STRESS MEDICINE AB

CARISM Center for Applied Research in Integrated Stress Medicine

Mälardalen University in cooperation with Swedish Center for Stress Medicine and Stress Medicine AB

Invitation:

Workshop on neuropsychophysiology: neuro- and biofeedback

Mälardalen University, Västerås, Sweden, September 29, 2012

Clinical, wellness and performance approaches based on applied neuropsychophysiology – neuro and biofeedback: Background, applications and demonstrations. Within medicine and especially biopsychosocial medicine there is an evident increased consensus for the efficacy of interventions viewing EEG, heart rate variability biofeedback for treatment of different disorders. This workshop address both neuro- and biofeedback with a priority in this workshop for EEG - measurements.

Agenda

8.00	Informal prestart, setting up equipment, initial testing, fika and informal discussions
9:30	Start of workshop and opening remarks. Bo von Scheele and Shahina Begum, MDH
9:40	Complex sensor signal analysis using artificial Intelligence, Peter Funk
9.50	Basics in EEG with a specific focus on practical use: Arne Edvardsson, Sportbiofeedback and Bo von Schéele, MdH and Stress Medicine AB
10.50	Break
11.00	Biofeedback using Heart Rate Variability /Respiratory Sinus Arrhythmia as well as Exhalation CO_2 as parameters for biofeedback.
11.00	Integration and practical issues
12.00	Lunch on your own
13.00	Hands-on
14.00	Summing up: Bo von Schéele

Presenters

Shahina Begum, PhD at MDH; main research interests include stress diagnosis system, medical decision-support systems, sensor signal processing, and intelligent learning systems.

Fil. mag. Arne Edvardsson, Sportfeedback, Gothenburg. Working with NeXus 10 Neurofeedback system

Professor Peter Funk (Computer Science/Intelligent systems Mälardalen University)

Professor Bo von Schéele, PhD in Psychology and Professor in Medical Engineering at MDH and Director of Institute for Cooperation in Advancement of Lifestyle Medicine

Background

The technical development makes it possible now to analyse some crucial factors/systems related to medical and psychological problems/diseases. Through measurement and analysis (adding complex analyses approaches based on artificial intelligence program) of individual´s dynamic processes, we can better understand how lack of health and diseases are developed. We can also better follow the effects of rehabilitation in individuals (individualized strategies).

This means we can go from symptoms as basic base for diagnosis to analysis of psychophysiological dysfunctions for symptoms/ problems/diseases and also better understand how health is developed and maintained, as well as how interventions can be conducted, in terms of prevention or treatment.

At present we can do this most effectively in the domains of stress related problems. At the same time we now better understand that stress, as Selye in the 1930-50s argued, is involved in most (if not all) life style related diseases and problems, such as cardiovascular, including hypertension, autoimmune, and psychological ones as well as some kinds of cancer.

Information & registration

Fee for the workshop is 630 SEK (PhD students 300)

More information can be obtained from Bo von Scheele, bo.vonscheele@stressmedicin.se or Shahina Begum shahina.begum@mdh.se

Register to info@stressmedicin.se
Payment to Bankgiro - 491-7662 Stress Medicine, organisations number 556791-6084. Faktura/receipt at workshop.

Welcome!

CARISM Center for Applied Research in Integrated Stress Medicine

Institute for Coperaton in ICALM Advancement of Lifesstyle Medicine

STRESS MEDICINE AB

MÄLARDALEN UNIVERSITY SWEDEN

VOLVO

iMed En investering för framtiden

NovaMedTech

SCS

KK-stiftelsen

ISS Intelligent Sensor Systems

EUROPEISKA UNIONEN

Mälardalen University in cooperation with Swedish Center for Stress Medicine and Stress Medicine AB.