

## Kinesiological EMG in Clinical Settings

An introduction to the scientific principles, applications and analysis strategies of quantitative EMG measurements

<b>Invited speaker:</b>	Peter Konrad PhD, ProPhysio Centrum für Physiotherapie Rehabilitation und Prävention – Köln, Germany
<b>Date, Location:</b>	At applicants' choice, his own institute/company
<b>Presentation:</b>	Scientific lecture and practical demonstrations
<b>Participants:</b>	Medical doctors, physiotherapists and rehabilitation trainer

### Topics:

#### EMG neuromuscular basics and principles

- Origin of the EMG signal
- Motor unit recruitment and firing
- Detection techniques and amplifier principles

#### Analysis and Interpretation Strategies

- Signal processing
- EMG analysis parameters and techniques
- Interpretation strategies

#### Kinesiological EMG as an evaluation tool in clinical settings

- Manual Muscle Function Tests assisted by EMG
- Posture Analysis
- Functional Movement Testing
- Gait Analysis
- EMG Isokinetics
- EMG based Biofeedback training

#### Practical Demonstration of selected application examples

- How to prepare an EMG measurement
- How to perform clinical EMG tests
- Biofeedback training