





# BIOPAC Systems & JoR AB presents

# **BIOPAC Nordic workshop Sweden 2026**

JoR AB has the pleasure to announce the BIOPAC 2026 Nordic Workshop in Sweden in cooperation with Centre for Imaging Research which is kindly hosting the event!

Location: Karolinska Institutet

Sal Louis, Entréplan, Widerströmska huset

Tomtebodavägen 18a

171 65 Solna

Find your way (google maps)

Time: Mon 9 Feb 2025, 08:45-16:30

Presenter: Fredrik Rådebjörk, JoR AB

**Workshop contact:** Fredrik Rådebjörk, JoR AB, BIOPAC Nordic distributor

> fredrik@jor.se, +46-708-34 28 23 (for questions about the workshop)

Jörgen Rosén, PhD, Head of KI MRI-Center Core Facility Local host contact:

and Deputy Director Centre for Imaging Research (CIR)

jorgen.rosen@ki.se

(for questions about the venue)

Cost: The seminar is free of charge and open to participants from

> related research fields across all Nordic countries. However, due to the limited number of seats and lunch arrangements,

advance registration is required.

All presentations will be held in English.

Registration: Mandatory registration. You find the registrationform at the

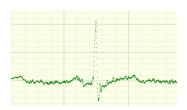
bottom of this event page.

Please register before 2026-01-30 to help our planning!









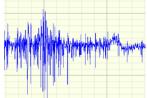
Learn the principles of measurement technology and signal processing and how to deal with common measures in psychopsychology, cognitive science and physiology. We explain how to avoid common mistakes during data collection. We go through several typical examples and explain the signal processing workflow and the important cycle detector tool.





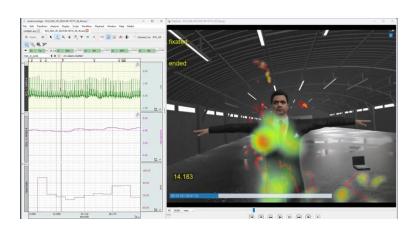




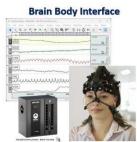




Learn what is required to conduct experiments in Virtual Reality. What equipment you need, the skills you need, and how to avoid making it more complicated than it has to be. We will show step by step how to make a real VR world with physiological measurements using the BIOPAC system and eye-tracking from scratch without beeing a programmer. We also explain how to take it to next level by adding code in Python for event handling and biofeedback.







We are proud to present the new exo-skeleton based fNIRS system for wholehead brain imaging. This is now fully integrated with AcqKnowledge! We explain the important differences between a CAP-design and a exo-skeleton, and exactly how it matters to research.

This is a great opportunity to meet both with JoR and other researchers!







# **Agenda**

Do you have a special request for a subtopic? Submit your wishes when you register! The sequence and relative duration of subtopics may be tuned following final scheduling and participant requests.

### 08:45 Coffee & registration

# 09:00 Welcome and overview of the day

# Introduction to physiological measurements

- Software, amplifiers, electrodes and sensors what do you need?
- Measurement technology basics, bandwith and sampling, electrical and physiological noise
- Different experimental contexts
- Measures in psychology and cognitition

## LIVE demo: Setup, acquire and postprocesss real data

Introduction to AcqKnowledge

Howto use calculated, control and meta channels

### 11:00 Short break & discussions

### 11:15 Signalquality and postprocessing workflow

- O How to know if you have a "good signal" and what to do when you don't?
- Basics: Rate detection and filtering
- o EDA, HRV index symphatetic and vagal activity
- Overview of other special analysis
- Cycle detector, event related processing, nested measurements and other custom analysis

#### 12:00 Lunch & discussions

### 13:00 Drag-and-Drop automation for postprocessing

Automate and batch postprocessing with workflow GUI - no scripting needed!

### Physiological experiments in VR made easy – Vizard & Sightlab

- How complicated does it really have to be?
- Markers & biofeedback from BIOPAC to a VR engine?
- A development platform made for experiments not games
- The Quickest way to startup your VR lab
- LIVE demo: Developing your first VR experiment without code
  - Build the 3D world: Use 360 videos or 3D models
  - Modify and arranged objects in the 3D world with Vizard inspector
  - Tag objects for eyetracking to get fixation markers to MP200/MP160
  - Setup the BIOPAC system to sync
- o Goto next level by adding Python code for event handling and biofeedback

### 15:00 Short break & discussions

### 15:15 Introduction to fNIRS - methods and applications

Measures brain activity via hemodynamics

# Brain imaging with wholehead fNIRS exo-skeleton and brain-body platform

- Critical advantages of the exo-skeleton design
- Howo setup participant and acquire fNIRS data
- Advantages of the integration with other physiological signals
- How pain and discomfort from equipment influence your data and limit your experiment

## Questions?

#### 16:30 End of seminar