



# Torben Hager

## Chief Scientific Officer

Biobserve GmbH

<http://www.biobserve.com>



## Bilateral Meetings

- Thursday (1:30pm - 6:00pm)
- Friday (9:00am - 12:00pm)
- Friday (12:00pm - 4:00pm)

## Description

Biobserve designs and establishes customized solutions for advanced behavioural phenotyping of animal models. These solutions include hardware, software for experimental control and the analysis of data, as well as scientific and technical support.

Biobserve was founded in 2001 by Dr. Christian Gutzen. Since then its core-competence is specialized software for video-based tracking of animals. Meanwhile, the implementation of this video-based automated observation is extended to a multiplicity of applications, not only for the purpose of scientific research, but also to non-scientific areas (e.g., training and simulation, traffic observations, etc.).

During my PhD at the VU University in Amsterdam I developed a novel, home cage-based, fully automated setup for the assessment of emotional learning in mice on drastically extended time-scales (Hager et al., 2014: <http://www.ncbi.nlm.nih.gov/pubmed/25278853>). As an Early Stage Researcher (ESR) within the *Marie Curie Actions* Initial Training Network (ITN) "Brain Train" (<http://www.brain-train.nl/>) I intensively collaborated with Biobserve (industrial partner/ SME in ITN "Brain Train") on the development of this novel behavioral paradigm.

Building up on this collaboration, I joined Biobserve in 2015 as Chief Scientific Officer. We further intensified our efforts on the development of novel behavioral paradigms as well as on the improvement of classic models, both in order to increase the validity of scientific findings. Therefore, we are proud to offer an outstanding expertise on the design, the implementation and the analysis of novel behavioral paradigms. Importantly, this includes the simultaneous monitoring and analysis of concomitant measures (e.g., Video, EEG, and ECG), often referred to as "sensor fusion", as well as the automated output based on operant decisions for the control of external hardware such as doors, RFID-based or optogenetical applications.

Organization Type

Company

Organization Size

1-10

Founding Year

2001

Email

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Country

Germany

City

Bonn, Pützchens Chaussee 62 [Google map](#)

Offer

### **Development of customized solutions for automated behavioral phenotyping.**

We offer the development of customized behavioral setups towards fully automated experiments. This includes software (experimental control and analysis), hardware as well as seamless hardware-software communication.

Keywords: R&D Behavior Automation Novel paradigms

Cooperation Offered

1. Sales / Distribution
2. Technical co-operation

Offer

### **Scientific consulting (behavioral neuroscience)**

We offer scientific consultation in the context of behavioral phenotyping. This includes the design of behavioral paradigms, realization of experiments (with a focus on automation), as well as advanced analysis of the behavioral performance.

Keywords: R&D Behavior Automation Novel paradigms

Cooperation Offered

1. Technical co-operation
2. Other

Offer

### **Software for the automation of behavioral experiments.**

We offer highly sophisticated software for the observation and analysis of behavioral experiments. The video-based 3-point-tracking of subjects allows for script-controlled, automated paradigms, high levels of reproducibility and increased validities of scientific findings.

Keywords: R&D Behavior Automation Novel paradigms

## Cooperation Offered

1. Sales / Distribution

## Offer

### **Advanced behavioral phenotyping of animal models.**

We offer an outstanding expertise in the conceptual design, establishment, and scientific evaluation of novel behavioral tests. This includes novel approaches (e.g., home cage-based), automation, and advanced analysis.

Keywords: R&D Behavior Automation Novel paradigms

## Cooperation Offered

1. Technical co-operation

## Request

### **Collaboration on advanced behavioral phenotyping of animal models.**

We are looking for partners to conceptualize, establish, and validate novel behavioral models and tests. This includes hardware, software as well as scientific/statistical concepts.

Keywords: R&D Behavior Novel paradigms Automation

## Cooperation Requested

1. Technical co-operation