

EBL COVID-19 Protocol

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EBL Guidelines

August 2020

This document contains the standard EBL Guidelines, complemented by currently valid COVID-19 protocols.

When EBL Guidelines contradict with COVID-19 protocols, COVID-19 protocols apply.

In case of any questions, please contact ebl@essb.eur.nl

EBL COVID-19 Protocol

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1. Introduction

The COVID-19 pandemic has forced a shutdown of all physical research activities in the Erasmus Behavioural Lab (Mandeville T12). This document includes a description for each type of research of which regulations, adaptations, equipment and services are necessary to safely re-open the EBL, while the COVID-19 pandemic is still present. To enable the restart of research with human participants, hygiene countermeasures and guidelines for behaviour are implemented in accordance with general RIVM advice, aligned with EUR generic campus protocols where possible. A workflow is proposed for all parties involved that will enable the EBL board to decide which studies can safely be conducted given the circumstances. The regulations given are developed in close consultation with other research labs in the NL, the RIVM measures, and EUR guidelines on re-opening Mandeville.

2. Overview

According to government and RIVM regulations and within the context of EUR corona measures, EBL shall include a number of measures to safeguard reopening of the labs.

General principles

- the general RIVM rules are leading <https://www.rivm.nl/coronavirus-covid-19>
- employees who can work from home will continue to do so
- at the lab facility, comply to 1.5m distance rule
- take extra protective measures when physical contact is needed
- participants must answer health check questions before participation
- to control the quantity and the flow of people using the lab, the capacity of lab facilities and available time slots will only be partly available, closely monitored and continuously adjusted in order to reduce the risk of infection

Hygienic measures:

Independent of the individual research and used equipment, it is the responsibility of the researcher to clean the lab room after the participant has left. A protocol for the usage of wipes and disinfectant will be available. Furthermore, the researcher is responsible of following the general rules regarding hand hygiene and wearing protective gear if required (see individual protocols).

Research categories for restart:

The kind of research that can be restarted, and to what extent, depends on the nature of the research. In the context of COVID-19 measures there are 3 research categories, classified by the risk of transmission.

1. Low risk: research without participants.
2. Medium risk: research with participants where 1.5m physical distance can be maintained.
3. High risk: research with participants where no physical distance can be maintained.

In accordance with government guidance and thereto related EUR measures, the above categories will serve as milestones for phased restart of research activities.

Preconditions for restart

Prioritizing studies:

Considering that initially only a limited part of the lab facility will be made functional and only limited number of time slots will be made available, not all studies can take place. An approval from the EBL advisory group is needed to reserve a time slot at the lab. The approval procedure is described in detail in section **Responsibilities**.

Accessing EBL facilities:

Physical access to the EBL facility is dependent on a number of external factors such as accessibility of the campus, functioning of the Mandeville building (including AC, emergency support, campus services like cleaning, security and BHV).

Within the EBL facilities protocols are set in place to guarantee a safe work environment for researchers and participants. These include health-check questionnaires, adjusted waiting room and lab rooms, one-way traffic regulation, and limited use of key cabinet, etc.

Conducting your research:

Protocols are made available per lab facility with specific instructions for using the setup in section **Operations**. This includes mandatory steps needed to perform before, during and after the experiment session. Only this way can we maintain the required level of hygiene, safety and data quality. Personal protection and hygiene materials are supplied at the lab. Before starting a new study in the EBL, each researcher needs to have an intake with EBL staff to see whether the new COVID-19 measures can be met while running the study.

Opening hours:

As of August 1st, 2020, operating hours of the EBL lab are as regular, with the constraint of being able to provide a safe working environment for researchers, participants and EBL staff. Support by EBL staff is available from 9:00-19:00. Support is offered preferably through digital channels. During the initial start-up phase, on-site support is possible by appointment. All contact information regarding the EBL can be found in the 'Lab guide for researchers and students', located at <https://ebl.eur.nl>.

Continued monitoring:

We will continue to monitor the RIVM, OCW, VSNU and other relevant guidance on COVID-19, along with university communication, and project requests, and assess impact on our operations. This protocol will be adjusted as the situation evolves. Latest version is available at <https://ebl.eur.nl>.

3. Restart phases

During the first phase of re-opening the EBL, all studies will be planned in consultation with the EBL board and EBL staff. A request to plan a study can be sent to ebl@essb.eur.nl. Requests can be done by researchers and PhD's; students cannot request EBL access during the first phase. All request will be reviewed in accordance with the regulations that can be found in section **Responsibilities**.

What types of research/usage can be restarted, and to what extent, depends on the nature of the study, as well as the physical layout of the labs or setups involved. To describe this topic more clearly, research is divided in 3 risk levels.

Category 1: Low risk, research without participants or contact with colleagues. This entails work or studies where no physical encounters happen like testing of a setup, preparation a setup, getting acquainted with equipment, prototyping, simulation, coding or online studies.

Category 2: Medium risk, research with participants where 1.5m physical distance can be maintained sometimes after making some adaptations to the labs. This entails studies with reaction time experiments and technical and qualitative tests using participants. These are all studies which can be run when the participants know how to perform the task. During these studies *physical distancing* can be maintained.

Category 3: High risk, research with participants where no physical distance can be maintained. This entails studies in which *physical distancing* cannot be maintained. This includes physiological studies, sample taking and EEG-studies, where electrodes need to be attached to the participant.

A detailed protocol description on labs and standard setups can be found in section **Operations**.

4. Responsibilities

Important! The researcher (PI) is responsible for the safety of his/her research protocol. It is therefore also important for the individual researcher to make informed decisions about when to start the own research project again. This should include an individual risk-benefit analysis taking into account that even with the best safety guidelines and measures, there is no 100% safety.

The EBL board together with the EBL research support staff, will discuss incoming requests and approve.

In the first phase, only studies performed by PIs and PhD students will be allowed. In a later phase, after research by staff is enabled, requests including students can also be considered.

Researchers (Principle Investigators) who want to restart their research follow the steps as mentioned in the protocol appendix A. In brief:

1. researcher files request
2. EBL board together with the EBL research support staff look into the importance and feasibility of the study under the COVID-19 regulations
3. EBL staff provides labs resources, protocols and COVID-19 training
4. after passing these steps, researcher may conduct the study

Researchers have to follow the mentioned procedures to start their study and follow the guidelines when conducting research (contact-protocol, individual lab protocols). Non-adherence to the new guidelines can lead to a suspension of access to the lab.

Communication

In order to continuously align EBL protocols to current EUR and government protocols, updates will be made to the EBL protocols on a regular basis.

Staff, researchers and participants will be informed of the current protocol by means of the following sources:

- at <https://ebl.eur.nl>, the current protocol will be part of the 'Lab guide for researchers and students'. (all new EBL users receive a pointer to this document)
- at MyEUR.nl, ESSB 'Corona Research Support' will contain a link to and description of the above document
- the initial version of the protocol, as well as larger updates to it, will be actively broadcasted to known EBL users via e-mail.

Furthermore, all users will be encouraged to stay informed when booking the EBL for research, using the above sources.

5. Operations

General EBL measures:

During the first phase of re-opening the EBL, all studies will be planned in consultation with the EBL board and staff. Section **Restart phases** provides more information on the procedure. Once access is cleared, depending on the lab or setup requested, a standard protocol and intake will be provided, or additional measures will be discussed, agreed upon and added to the protocol involved, for the study at hand.

Initially, the EBL Key Cabinet will not be available. EBL staff will be present and monitor lab booking slots, taking care of unlocking and locking of all doors in the EBL.

An important part of each study protocol involves contacting participants upfront, in order to present them with the standard COVID-19 questions that can be found in appendix B.

Procedure before study-session(s):

A contact-protocol (appendix B) is provided to the study supervisor or other (participant recruitment) role(s) involved. Participants should be contacted prior to each session appointment in order to verify whether they can participate, following the contact-protocol. Furthermore, before each test day, the questions found in the contact-protocol should also be self-answered by the study supervisor.

In both cases, if any of the questions from the contact-protocol is answered with a Yes, the person involved, whether supervisor or participant, cannot come to the EBL.

Study sessions involved have to be cancelled, or a replacement participant or study supervisor has to be made available

General rules during your stay at the EBL:

- do not shake hands
- put away your phone, preferably switch it off, do not touch it before leaving the EBL
- keep 1.5m distance from other people
- cough and sneeze in your elbow pit
- wash your hands often with soap, for at least twenty seconds
- know how to reach BHV services in case of a medical emergency

Technical support and training:

The EBL staff supports researchers in their usage of equipment and lab-setups. Normally, when problems occur, help is provided within the physical lab. During COVID-19 hazard, this

will be avoided as much as possible, by means of remote assistance using video calls and/or remote screen sharing.

Mandatory routing at Mandeville T12:

All participants and staff have to follow the mandatory routing in the lab area. This will be indicated by signs, and descriptions will be available. (see also appendix M)



Appendix A: Procedure for research in a COVID-19 EBL

Since the resources are limited, we have to regulate the lab access. In this document we further outline the procedure to enter the lab for your study. Please note this situation is new to us as well. Things are very much work-in-progress and we will do our best to make things run smoothly. But we most likely will run into problems. Please be patient and bear with us!

You need ethical approval for your study before you can apply for lab access.

- You need to make sure you can run your study in compliance with the COVID health and safety regulations as outlined in the document: “EBL COVID-19 Protocol”.
- If you have any doubts you can meet the safety requirements, please ask for advice.
- To apply for EBL access, send an email to: ebl@essb.eur.nl with the additional information:
 - o Why is it important to run the study at this time (and not a few weeks/ months later)?
 - o Can you meet all the COVID-19 requirements within your experiment given that you receive training from EBL staff? Ask if you’re not sure or if you see a possible risk.
 - o How many subjects do you want to test?
 - o Who will run the study?
 - o Which lab do you want to use (Cubicle-section, video-observation, EEG, eye tracking, 2- or 4-persons lab, with or without physiology)?
- The planning committee (EBL board & EBL staff) will review your (and all other) requests and will try to accommodate your studies.
- When approved, you get permission to book lab hours in a certain lab room, or the EBL staff will arrange this for you.
- Before starting your research, you have to follow COVID-19 training as provided by EBL staff
- To keep the numbers of people in the lab low, there is only one researcher (no interns, research assistants, students, or colleagues) allowed. If you need to be present with more researchers, please explain this in your lab access request.
- You need to collect your subject at the waiting room. We don’t want subjects wandering around the building.
- Don’t take any risks! Follow the COVID-19 protocol! Health and safety first.

At this moment we have a limited view on how much demand there is to run studies in the lab. We will start-up with limited access and gradually increase the capacity when things run smoothly. We will adjust the protocols where needed and will keep you informed on possible changes.

Appendix B: Contact-protocol

Until further notice, the participant should be contacted by telephone prior to each appointment to check whether they are allowed to come to the lab.

Mandatory health check questionnaire

Each day, prior to accessing the EBL everyone (including the staff!) must answer below health questions.

Health questions (will be available in printed versions in every lab):

If one of the questions is answered with YES, the person is not allowed to come to the EBL.

1. Are you currently experiencing, or have you experienced in the past 24 hours, any of the following symptoms: common cold, fever above 38°, cough, shortness of breath or difficulty breathing, sore throat, loss of taste or smell, chills, headache, muscle ache, nausea, diarrhoea?
YES / NO
2. Do you currently have a roommate/family member with above symptoms?
YES / NO
3. Have you had COVID-19 diagnosed with a laboratory test in the last 7 days?
YES / NO
4. Have you had a roommate/family member with COVID-19 diagnosed with a laboratory test and have you had contact with this roommate/family member less than 14 days ago while he/she was still having symptoms?
YES / NO
5. Are you in quarantine because you have had direct contact with someone who has been diagnosed with COVID-19?
YES / NO

Protocol for health questions

- Attention: privacy laws state that the answers may only be registered anonymously, e.a. without noting down personal details. Below guidelines offer help in that regard.
- Self-assessment: for both employees and participants apply that each person must ask the question him/herself each day before accessing the EBL. If one of the questions is answered with YES, the person may not come to the EBL. Participants will be made aware of this protocol when registering in the participant system.
- Pre-assessment by phone: Researchers must contact each participant by telephone one day prior to each appointment to make them aware of COVID-19 protocol. Participants must answer the health questions by phone to establish their health state. The researcher is not allowed to note down and register these answers.

- Pre-assessment at the EBL facility: Before entering the lab, each participant must again answer the health questions (see also individual protocols) to the researcher.

How to proceed if access to EBL is granted

- Participant must follow the instructions of the researcher and EBL staff any given moment.
- Follow the routing signs to enter the lab.
- After each study session, exit the facility immediately, follow the routing signs towards the exit.

How to proceed if access to EBL is refused

If one of the questions is answered with YES, the person may not come to the EBL.

- For employees, it means the measurements can be carried out by a colleague or must be cancelled.
- For participants, it means participant may not come to the lab and the appointment must be cancelled.

Hints for smooth access to EBL

- Inform your participant to enter the building from the **south side**, use the elevators to level T12. See template information in appendix M.
- Inform your participant to take into account the extra time needed to reach the campus and the EBL.
- Don't enter the building more than 5 minutes before your appointment

----- text for participant recruitment systems (ERAS, ERPS, EURO) -----

Before registering and partaking in a study, make sure you read and comply to COVID-19 regulations, part of the 'Lab guide for researchers and students', located at: <https://ebl.eur.nl>

----- end of text -----

----- text for CORONA research-page on MyEUR etc. -----

EBL has put a special COVID-19 protocol in place for physical use of EBL facilities. Before planning your research sessions, make sure you read the protocol and comply to the regulations, part of the 'Lab guide for researchers and students', located at: <https://ebl.eur.nl>

----- end of text -----

Appendix C: Description of the labs and needed adaptations

Support Rooms (Risk level: category 2)

The support rooms are equipped with multiple computers, mainly used for experiment preparation and analysis of data. In the normal setup a 1,5m distance cannot be held when the room is fully occupied, so the number of available workspaces needs to be reduced.

Normal setup:

- support room 1 offers 4 workspaces with computers, for ad-hoc usage
- support rooms 2 & 3 each offer 6 workspaces, for scheduled usage through the EBL booking system
-

COVID-19 adaptations:

- support room 1 will be repurposed as a corridor within the EBL, to enable a anticlockwise direction within the perimeter of the EBL
- initially, a maximum of 2 workspaces will be enabled in the EBL booking system for support room 2 & 3
- adding Plexiglas screens between workspaces?
- mandatory reservations for a workspace

Waiting Room (Risk level: category 2)

The waiting room is an open room which is meant to receive participants before they are called for their study session. It is an open room at the entrance of the EBL with chairs along the walls. Normally this room can take up to 15 people but with social distancing we need to reduce this number to a maximum of 3-4 people.

There are a couple of ways to extend the capacity outside of the waiting room for instance by using the corridor as an extended waiting room since people will be waiting for a (very) limited time.

Normal setup:

- open room, chairs along each wall, capacity up to 15 persons
- non-recording observation camera, viewable from lab-computers

COVID-19 adaptations:

- a maximum of 3-4 persons is allowed
- 1,5m markers on floor
- marking which seats can be used and which cannot
- automatic dispenser with disinfectant at the entrance of the waiting room
- sending participant information on the correct routing to the EBL since we will introduce one-way traffic in the EBL to make social distancing possible. (appendix M)
- regulating the inflow of participants by alternating start times to each study
1.

2-person labs (Risk level: category 2 or 3)

These labs are relatively small rooms with two desks with a computer on each desk. The rooms are mostly used by one researcher and one participant. The studies conducted in these labs vary from questionnaires to reaction tasks but are especially suitable for physiological signal studies where heart rate, skin conductance etc. are measured, this specific kind of research is covered later in this document. The labs have a movable divider between the two workspaces. Once in the room keeping a distance of 1,5 meters is difficult and freely moving in and out of these labs will not be possible for both people without the other person being affected by that.

Normal setup:

- 2 tables
- 2 computers (1 on each table)
- 1 movable divider between the 2 tables

COVID-19 adaptations:

- Plexiglas stands between tables for added safety
- TeamViewer link on computers for remote support

4-person labs (Risk level: category 2 or 3)

These labs are relatively small rooms within the present set-up 4 tables and 4 computers separated by dividers. The research done in these labs varies from questionnaires to behavioural tasks. These rooms are used for testing multiple participants at the same time but because one computer in each 4-person room is equipped with a parallel port they are also suited for recording physiological signals while a participant performs a task.

Normal setup:

- 4 tables
- 4 computers (1 on each table)
- 3 movable dividers between each set of tables

COVID-19 adaptations:

- disabling 2 computers, reducing the maximum number of available research spaces to two positions
- Plexiglas stands on top of the dividers between tables for added safety
- TeamViewer link on computers for remote support
-

Cubicle labs (Risk level: category 2)

The cubicles are small separated compartments, with a high level of acoustic insulation, with desk and a computer. We have 4 cubicle sections, 2 x 6 and 2 x 8 cubicles. Within the 2x6 cubicle room a small supervisor area is available where the researcher can start and monitor the experiments in the different cubicle sections. The cubicles are used to run large studies with many participants at the same time. Some studies have people working together via the computer, but most studies performed in the cubicles are individual tasks like behavioural experiments or questionnaires. The acoustic insulation and the presence of webcams makes

it possible for participants to be asked to record a video or respond with voice. Because every cubicle has its own door it can be closed, so distancing is not a problem.

Normal setup:

- 1 supervisor room (4 computers on 4 tables)
- 4 cubicle sections (2x 8, 2x 6, each with 1 computer)

Main issues:

- ventilation is a problem in these spaces, therefore we must monitor the usage of these rooms more closely
- cubicle walls cannot be cleaned because of the acoustic insulation
- the supervisor room is not big enough to hold more than one person at a time keeping the distancing in mind
- the waiting room cannot hold large numbers of participants

COVID-19 adaptations:

- only having one researcher perform his/her study at the same time allowing her/him to use all cubicles
- to improve the efficiency of research maybe studies can be combined to have one participant run a longer session performing multiple tasks
- having participants arrive at different times (for instance every 5 minutes) to avoid crowds in the waiting room
- more than one session a day only in the 8 cubicle labs, because these have better ventilation than the 12-cubicles. A minimal 3-hour pause between sessions to allow proper cleaning and ventilation of the cubicles. For example, one morning session then total cleaning followed by an afternoon session.
- 12-cubicles only one session a day per cubicle
- TeamViewer link on computers for remote support

Video labs (Risk level: category 2)

The video lab is used for recording video while participants are in an experiment that they are either aware of or not. The studies can be individual but are usually performed in groups. All actions and sounds can be recorded with a camera and a microphone.

Normal setup:

- 3 tables
- 1 camera
- 1 microphone
- 1 computer (in the supervisor room)

COVID-19 adaptations:

- wider view camera lens to enable participants to keep distance from each other
- second camera for extra visual angles making it possible to view a maximum of 4 people in the room.
- Plexiglas stands on the table between the participants

EEG labs (Risk level: category 3)

The EBL has 4 EEG labs available. Each EEG room holds a separate participant section with a special chair and the EEG equipment. Two rooms have an integrated kitchen in the room, the other two have a separate kitchen from which you enter the EEG supervisor room. Research carried out in these rooms is solely EEG experiments, sometimes combined with additional equipment. The EEG rooms are spacious enough to keep distance, however connecting the electrodes to a participant is impossible to do without keeping distance. There is no need for any physical changes in these labs but when applying an EEG to a participant strict safety precautions have to be taken. Once connected, the researcher and participant will be in separate rooms during the session.

Normal setup:

- 1 kitchen
- 2 tables
- 2 computers (1 on each table)
- 1 separate participant section with chair and stimulus screen

COVID-19 adaptations:

- TeamViewer link on computers for remote support
- foot-operated trash bin with lid for disposables

Eyetracker labs (Risk level: category 2 or 3)

In the EBL there are 2 eye tracker rooms. The setup of these rooms is basically the same as those of the 2-person rooms. Two positions separated by a movable divider. The eye trackers are used to track where a participant is looking on a screen. In many cases a headrest is used to stabilize the position of the participants' head to improve the quality of the data generated. The size of the eye tracker rooms is suitable for a researcher and a participant, but when passing each other in the room, keeping distance is impossible. The researcher will also have to adjust the eye tracker position to set it up correctly for the participant.

Normal setup:

- 2 tables
- 2 computers, one dedicated to the eye tracker, one for stimuli presentation
- 1 eye tracker
- 1 movable divider between the 2 tables

COVID-19 adaptations for Category 3:

- switching location of the researcher and the participant in the room setup to make social distancing possible
- blinds for the windows to minimise UV light coming into the room, influencing the measurement
- Plexiglas stands on dividers for added safety
- TeamViewer link on computers for remote support

COVID-19 adaptations for category 2:

- a height adjustable table for the eye tracker that can be remotely controlled to enable the researcher to set up the participant perfectly for the eye tracker.

- Plexiglas stands on top of the divider
- switching position (equipment) of participant and researcher
- blinding curtains to prevent UV light from coming into the room
- ordering and installing a height adjustable table in the eye tracker labs to make set up eye tracker remotely adjustable (Cat 2a).
- TeamViewer link on computers for remote support

Appendix D: Overall protocols for the different labs

Important general information

For all researchers in each lab **these general rules** apply:

1. If the COVID safety and health protocol requires you to use any protective equipment (nitrile disposable gloves, mouth/face masks), this will be distributed by the EBL staff. Please follow their recommendations of how to safely use these (especially the face masks).
2. Each researcher is responsible for cleaning the lab and equipment before and after the use thoroughly according to the protocol. This is of utmost importance for reducing the risk of infections and running a safe lab. If we see that a researcher does not follow the protocol carefully, we will revoke access to the lab!
3. The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person will not be allowed to participate in EBL-research. Do not register answers!
4. The researcher has to be healthy and stays at home if any of the questions in the contact protocol is answered with a “Yes” by him/her.
5. Instruct your participant well on how to get to the EBL waiting room and point out the rules within the EBL, ask them to wait in the waiting room until they are picked up by the researcher.
6. Picking up the participant from the waiting room:
 - a. the participant will be waiting for you in the waiting room or hallway
 - b. get your participants one by one from the waiting area
 - c. do not shake hands and keep a distance of at least 1,5 meters
 - d. walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
 - e. ask the participant to switch his/her phone to airplane mode, put it away, and tell them not to touch it during the study session
 - f. ask participants to disinfect their hands with disinfectant
 - g. arriving at your lab room open the door for the participant
 - h. step back to let the participant enter the room first and direct them to their desk
 - i. before taking a seat, ask the participant the questions from the contact-protocol again (appendix B). If any of the questions from the contact-protocol is answered with a “Yes”, the person will not be allowed to participate in EBL-research and should be guided to the exit immediately. Do not register answers!
 - j. For participants, the lab is open on appointment only so instruct subjects to leave the building once they have completed the experiment.
7. The following hygienic measures apply in general:

- reserve a slot at a particular workspace, following EBL general guidelines
- when traveling to the EBL, follow protocol and directions
- arriving at the rooms, make sure your spot is available
- before entering the lab room, thoroughly wash your hands in the restroom, or use the disinfectant hand-gel provided.

Note: What follows, are the specific protocols for the different labs and rooms at EBL, also in terms of aforementioned risk categories. The descriptions contain a general description of the setup of the lab, how the setup will be changed to comply to COVID-19 safety regulations, and then, the user protocol is given. These protocols will be adjusted continuously and will be handed out to the researchers. Researchers will have to do an intake to familiarize with these protocols. For most studies only one of the following appendices is applicable.

Appendix E: Support rooms protocol

Risk Level: Category 2

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes

User protocol:

The researcher has to reserve a spot in the support rooms at least one day before they want to work there. On the day of working we demand that you ask yourself the questions from the contact-protocol (appendix B) regarding your health. If any of the questions from the contact-protocol is answered with a “Yes”, you are not allowed to work in the EBL or the support rooms.

- make sure you are healthy, following general COVID-19 protocols
- when traveling to the EBL, follow protocol and directions
- arriving at the waiting room, make sure your spot is available by reserving it at least one day before
- disinfect your hands before entering the support room
- keep distance to others following the protocol

Before sitting down clean the following items with disinfectant disposable wipes:

- table
- keyboard
- mouse
- armrests of participants’ chair
- all used materials like pencils etc.

when you are done working for the day clean the following items with disinfectant disposable wipes:

- table
- keyboard
- mouse
- armrests of participants’ chair
- all used materials like pencils etc.

Appendix F: 2-person labs protocol

Risk Level: Category 2 or 3

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes
- nitrile disposable gloves

User protocol:

Procedure one day before the study session:

The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Procedure at the day of the study session:

- when traveling to the EBL, follow directions and protocol as found in appendix M.
- follow generic EBL rules during your lab usage (section **Operations**)

Before starting your study session:

- use nitrile disposable gloves to open the door of the lab room (if it's not already open) and prepare your setup for the research session

After your setup is complete and before picking up the participant clean the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants' chair
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Picking up the participant:

- get your participants one by one from the waiting area
- walk according the mandatory routing, anticlockwise to the waiting area
- the participant will be waiting for you in the waiting room or hallway
- ask the participant to switch his/her phone to airplane mode, put it away and tell them not to touch it during the research session
- ask participants to disinfect their hands with disinfectant
- do not shake hands and keep a distance of at least 1,5 meters
- walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
- arriving at your lab room open the door for the participant
- step back to let the participant enter the room first and direct them to their desk
- the participant position will be at the window in the room (far end)

Before taking a seat, ask the participant the questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research and should be guided to the exit immediately. Do not register answers!

Instructing the participant and starting your session:

- make sure the participants clean their hands with the provided disinfectant
- instruct your participant on how to carry out the task
- if needed, close the door of the lab and start your session

After study session is finished:

- open the door for your participant
- walk in front of the participant, guiding them to the exit of the EBL
- maintain at least a 1.5m distance

Finishing the study session:

Clean your hands with disinfectant hand-gel and clean the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants’ chair
- light switches
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Study-specific protocol additions will be determined by EBL staff in consultation with the study supervisor and/or the principal researcher.

If required, they will be part of this protocol.

Appendix G: 4-person labs protocol

Risk Level: Category 2 or 3

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes
- nitrile disposable gloves

User protocol:

Procedure one day before the study session:

The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Procedure at the day of the study session:

- when traveling to the EBL, follow directions and protocol as found in appendix M.
- follow generic EBL rules during your lab usage (section **Operations**)

Before starting your study session:

- use nitrile disposable gloves to open the door of the lab room (if it's not already open) and prepare your setup for the study session

After your setup is complete and before picking up the participant clean the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants' chair
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Picking up the participant:

- get your participants one by one from the waiting area
- walk according the mandatory routing, anticlockwise to the waiting area
- the participant will be waiting for you in the waiting room or hallway
- ask the participant to switch his/her phone to airplane mode, put it away and tell them not to touch it during the study session
- ask participants to disinfect their hands with disinfectant
- do not shake hands and keep a distance of at least 1,5 meters
- walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
- arriving at your lab room open the door for the participant
- step back to let the participant enter the room first and direct them to their desk
- the participant position will be at the window in the room (far end)

Before taking a seat, ask the participant the questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research and should be guided to the exit immediately. Do not register answers!

Instructing the participant and starting your session:

- make sure the participants clean their hands with the provided disinfectant
- instruct your participant on how to carry out the task
- if needed close the door of the lab and start your session

After study session is finished:

- open the door for your participant
- walk in front of the participant, guiding them to the exit of the EBL
- maintaining at least a 1.5m distance

Finishing the study session:

Clean your hands with disinfectant hand-gel and use nitrile disposable gloves while cleaning the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants' chair
- light switches
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Study-specific protocol additions will be determined by EBL staff in consultation with the study supervisor and/or the principal researcher. If required, they will be part of this protocol.

Appendix H: Cubicle labs protocol

Risk Level: Category 2

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes
- nitrile disposable gloves

User protocol:

Procedure one day before the study session:

The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Procedure at the day of the study session:

- when traveling to the EBL, follow directions and protocol as found in appendix M.
- follow generic EBL rules during your lab usage (section **Operations**)

Before starting your study session:

- use nitrile disposable gloves to open the door of the lab room (if it's not already open) and prepare your setup for the study session

After your setup is complete and before picking up the participant clean the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants' chair
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Picking up the participant:

- get your participants one by one from the waiting area
- walk according the mandatory routing, anticlockwise to the waiting area
- the participant will be waiting for you in the waiting room or hallway
- ask the participant to switch his/her phone to airplane mode, put it away and tell them not to touch it during the study session
- ask participants to disinfect their hands with disinfectant
- do not shake hands and keep a distance of at least 1,5 meters
- walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
- arriving at your lab room open the door for the participant
- step back to let the participant enter the room first

Before taking a seat, ask the participant the questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research and should be guided to the exit immediately. Do not register answers!

- direct the participant to their cubicle
- step back and let the participant enter the cubicle

Instructing the participant and starting your session:

- instruct your participant on how to carry out the task
- if needed close the door of the lab and start your session

After study session is finished:

- open the door for your participant
- walk in front of the participant, guiding them to the exit of the EBL
- maintaining at least a 1.5m distance
- when a cubicle is used, it may not be used for at least 4 hours

Finishing the study session:

Clean your hands with disinfectant hand-gel and use nitrile disposable gloves while cleaning the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants’ chair
- light switches
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Study-specific protocol additions will be determined by EBL staff in consultation with the study supervisor and/or the principal researcher.

If required, they will be part of this protocol.

Appendix I: Video lab protocol

Risk Level: Category 2

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes

User protocol:

Procedure one day before the study session:

The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Procedure at the day of the study session:

- when traveling to the EBL, follow directions and protocol as found in appendix M.
- follow generic EBL rules during your lab usage (section **Operations**)

Before starting your study session:

- use nitrile disposable gloves to open the door of the lab room (if it's not already open) and prepare your setup for the study session

After your setup is complete and before picking up the participant clean the following items with disinfectant disposable wipes:

- door handle
- tables
- armrests of participants' chair
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Picking up the participant:

- get your participants one by one from the waiting area
- walk according the mandatory routing, anticlockwise to the waiting area
- the participant will be waiting for you in the waiting room or hallway
- ask participants to disinfect their hands with disinfectant
- do not shake hands and keep a distance of at least 1,5 meters
- walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
- arriving at your lab room open the door for the participant
- step back to let the participant enter the room first and direct them to their chair

Before taking a seat, ask the participant the questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research and should be guided to the exit immediately. Do not register answers!

Instructing the participant and starting your session:

- ask the participant to switch his/her phone to airplane mode, put it away and tell them not to touch it during the study session
- make sure the participants clean their hands with the provided disinfectant hand-gel
- if needed close the door of the lab and start your session

After study session is finished:

- open the door for your participant
- walk in front of the participant, guiding them to the exit of the EBL
- maintaining at least a 1.5m distance

Finishing the study session:

Clean your hands with disinfectant hand-gel and use nitrile disposable gloves while cleaning the following items with disinfectant disposable wipes:

- door handle
- tables participants
- table researcher
- keyboard
- mouse
- Plexiglas stands
- armrests of participants' chair
- light switches
- all used materials like pencils etc

Throw away the disposable wipes and disposable gloves in the trash bin.

Study-specific protocol additions will be determined by EBL staff in consultation with the study supervisor and/or the principal researcher.

If required, they will be part of this protocol.

Appendix J: EEG labs protocol

Risk Level: Category 3

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes
- nitrile disposable gloves
- masks for participant and researcher
- Face shield for researcher

User protocol:

Procedure one day before the study session:

The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Ask your participant to bring a towel to the lab (to dry their hair after the session).

Procedure at the day of the study session:

- when traveling to the EBL, follow directions and protocol as found in appendix M.
- follow generic EBL rules during your lab usage (section **Operations**)

Before starting your study session:

- use nitrile disposable gloves to open the door of the lab room (if it's not already open) and prepare your setup for the study session

After your setup is complete and before picking up the participant clean the following items with disinfectant disposable wipes:

- door handles
- tables
- keyboards (researcher and participant)
- SR-box (if used)
- mouse
- armrests of participants' chair
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Picking up the participant:

- when using EEG lab 3 or 4 leave the door between the kitchen and the supervisor room open when you go out to pick up your participant
- get your participant from the waiting area
- walk according the mandatory routing, anticlockwise to the waiting area
- the participant will be waiting for you in the waiting room or hallway
- ask the participant to switch his/her phone to airplane mode, put it away and tell them not to touch it during the study session
- ask participants to disinfect their hands with disinfectant
- do not shake hands and keep a distance of at least 1,5 meters

- walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
- step back to let the participant enter the room first and ask him/her to walk into the researcher area

Before taking a seat, ask the participant the questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research and should be guided to the exit immediately. Do not register answers!

Instructing the participant and applying the EEG:

- direct them to the participant room and ask your participant to take a seat in the EEG chair
- ask the participant to put away his/her phone and switch it off or set it to airplane mode and tell them not to touch it during the study session
- make sure the participant cleans his/her hands with the provided disinfectant
- provide the participant with a face mask
- put on nitrile disposable gloves
- put on face mask
- put on face shield
- apply the EEG as instructed in the separate EEG course*
- make sure your participant feels safe and relaxed during the procedure and make sure they notify you when this is not the case
- when the participant is connected check the EEG signal for artefacts and redo faulty connections
- when done close the door of the lab and start your session

After study session is finished:

- put on fresh nitrile disposable gloves
- put on face mask
- put on face shield
- disconnect participant
- ask participant to throw away own mask
- clean EEG equipment according to the normal instructions

Finishing the study session:

Clean your hands with disinfectant hand-gel and clean the following items with disinfectant disposable wipes:

- door handles
- tables
- keyboards (researcher and participant)
- SR-box (if used)
- mouse
- armrests of participants’ chair
- kitchen
- tap in the kitchen
- light switches
- switches for the blinds

- air conditioning control (lab3 & 4)
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Study-specific protocol additions will be determined by EBL staff in consultation with the study supervisor and/or the principal researcher.

If required, they will be part of this protocol.

***Researchers can only do EEG research after attending the EEG training**

Appendix K: Eyetracker labs protocol

Risk Level: Category 2/3

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes
- disposable breathing mask
- face mask, reusable
- disposable Nitrile nitrile disposable gloves

User protocol:

Procedure one day before the study session:

The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Procedure at the day of the study session:

- when traveling to the EBL, follow directions and protocol as found in appendix M.
- follow generic EBL rules during your lab usage (section **Operations**)

Before starting your study session:

- use nitrile disposable gloves to open the door of the lab room (if it's not already open) and prepare your setup for the study session

After your setup is complete and before picking up the participant clean the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants' chair
- chin rest (when used)
- all used materials like pencils etc.

Throw away the disposable wipes and disposable gloves in the trash bin.

Picking up the participant:

- get your participants one by one from the waiting area
- walk according the mandatory routing, anticlockwise to the waiting area
- the participant will be waiting for you in the waiting room or hallway
- ask participants to disinfect their hands with disinfectant
- do not shake hands and keep a distance of at least 1,5 meters
- walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
- arriving at your lab room open the door for the participant
- step back to let the participant enter the room first and direct them to their desk

- the participant position will be at the window in the room (far end)

Before taking a seat, ask the participant the questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Procedure:

Instructing the participant and starting your session:

- make sure the participants clean their hands with the provided disinfectant
- direct the participant to sit in front of the eye tracker
- adjust the eye tracker in a way that the eyes are optimally picked up by the tracker
- instruct your participant on how to carry out the task
- start task

After study session is finished:

- open the door for your participant
- walk in front of the participant, guiding them to the exit of the EBL
- maintaining at least a 1.5m distance

Finishing the study session:

Clean your hands with disinfectant hand-gel and use nitrile disposable gloves while cleaning the following items with disinfectant disposable wipes:

- door handle
- table
- keyboard
- mouse
- armrests of participants' chair
- chin rest (when used)
- light switches
- all used materials like pencils etc.

Throw away the disposable wipes, masks and disposable gloves in the trash bin.

Appendix L: Autonomous measures protocol (various labs)

Risk Level: Category 3

Materials provided:

- disinfectant hand-gel
- disinfectant disposable wipes
- nitrile disposable gloves
- masks for participant and researcher
- face shield for researcher

User protocol:

Procedure one day before the study session:

The researcher contacts the participant 1 day prior to each study session to ask questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research. Do not register answers!

Procedure at the day of the study session:

- when traveling to the EBL, follow directions and protocol as found in appendix M.
- follow generic EBL rules during your lab usage (section **Operations**)

Before starting your study session:

- use nitrile disposable gloves to open the door of the lab room (if it's not already open) and prepare your setup for the study session

After your setup is complete and before picking up the participant clean the following items with disinfectant disposable wipes:

- door handles
- tables
- keyboards (researcher and participant)
- SR-box (if used)
- mouse
- armrests of participants' chair
- all used materials like pencils etc.
- Biopac wires

Throw away the disposable wipes and disposable gloves in the trash bin.

Picking up the participant:

- put a sealed mask on the participants table (table at door side in a 2-person room and the second table from the door in a 4-person room)
- get your participant from the waiting area
- walk according the mandatory routing, anticlockwise to the waiting area
- the participant will be waiting for you in the waiting room or hallway
- ask the participant to switch his/her phone to airplane mode, put it away and tell them not to touch it during the study session
- ask participants to disinfect their hands with disinfectant
- do not shake hands and keep a distance of at least 1,5 meters

- walk in front of the participant, according the mandatory routing, anticlockwise to the lab room involved
- step back to let the participant enter the room first and ask him/her to walk into the researcher area

Before taking a seat, ask the participant the questions from the contact-protocol (appendix B) regarding the health of the participant. If any of the questions from the contact-protocol is answered with a “Yes”, the person involved will not be allowed to participate in EBL-research and should be guided to the exit immediately. Do not register answers!

Instructing the participant and applying the Biopac:

- make sure the participant cleans his/her hands with the provided disinfectant
- ask your participant to put on the mask that is on the table
- put on nitrile disposable gloves
- put on face mask
- put on face shield
- apply the Biopac electrodes as instructed by your supervisor or the EBL staff
- make sure your participant feels safe and relaxed during the procedure and make sure they notify you when this is not the case
- when the participant is connected check the Biopac signal for artefacts and redo faulty connections
- when done start your session

After study session is finished:

- put on fresh nitrile disposable gloves
- put on face mask
- put on face shield
- disconnect participant
- ask participant to throw away own mask
- clean Biopac electrodes and equipment according to the instructions in the separate kitchen attached to EEG3 or EEG4.

Finishing the study session:

Clean your hands with disinfectant hand-gel and clean the following items with disinfectant disposable wipes:

- door handles
- tables
- keyboards (researcher and participant)
- SR-box (if used)
- mouse
- armrests of participants’ chair
- kitchen
- tap in the kitchen
- light switches
- all used materials like pencils etc.

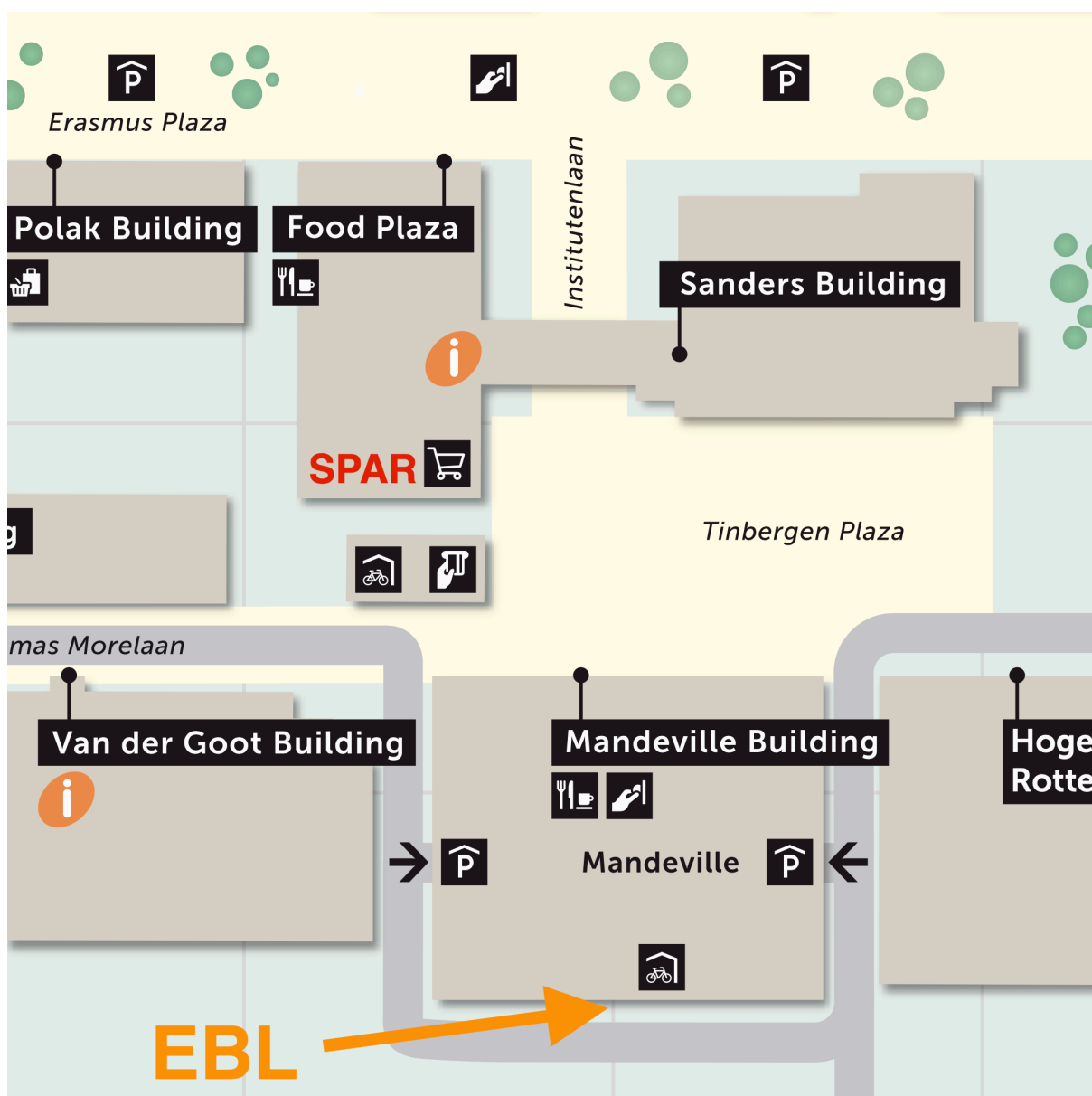
Throw away the disposable wipes and disposable gloves in the trash bin.

Study-specific protocol additions will be determined by EBL staff in consultation with the study supervisor and/or the principal researcher.
If required, they will be part of this protocol.

Appendix M: Directions to and from the EBL

The Erasmus Behavioural Lab (EBL) is located on the 12th floor of the Mandeville building. To get there from the campus side (SPAR) you will have to walk around the building to the back entrance (south side). Walk to the elevator section and take the elevator to the 12th floor. There you follow the instructions and walk *anticlockwise* till you get to the EBL (carpet on the floor). Go to the waiting room (located at the orange dot on the map of Mandeville T12) and wait there for the researcher with whom you have made your appointment.

After you finished your tasks, the researcher will guide you to the exit of the building.



Map of Mandeville T12 floor



- Route to the Waiting Area
- Waiting Area
- Route in EBL
- Exit

Research and the EBL

February 2020



Usage and Guidelines

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General information and guidelines

The Erasmus Behavioural Lab offers research facilities, financed by ESSB-DPECS-Psychology, ERIM and the CvB.

This document gives an overview of the possibilities and expected behaviour within the EBL. Each section presents an overview from a different perspective or organisational role, some information will thus be repeated.

The EBL provides researchers with a number of pre-configured setups to conduct psychological and behavioural research. In the section “Facilities” you can find an overview of the possibilities offered at the moment.

The EBL is available to the researchers and students of ESSB-DPECS (Psychology) and researchers affiliated with ERIM, and to their assistants/PhD’s etc.

In a shared facility, it is necessary to regulate a number of things to ensure optimal usage and availability of the EBL. In the section “[Usage by Role](#)”, a number of usage-scenarios and some practical guidelines are presented.

In general, the EBL staff offers advice and service in preparing and conducting research in a range of areas. The number of employees however is limited, so building a complete experiment, an on-line questionnaire etc. can only be done by the researchers, AiO’s/PhD’s, volunteers or students themselves. The EBL staff advises or gives limited support on the aspects of the experiment that integrate with standard equipment.

The EBL employs staff that primarily has the task of maintaining and supporting all facilities. Besides that, regular user support within the EBL is available on the subject of usage of the computers, the software and specific EBL equipment. Several practical matters can be dealt with directly by the staff of the EBL, like assigning keys, borrowing equipment, etc.

In general, we encourage anyone that wants to use the EBL (especially a first time), to make an appointment upfront, even before beginning the design of an experiment. The EBL staff has a lot of experience in designing, setting up, supporting research and analysing data, so please use that knowledge and experience. Depending on your needs, the meeting can be briefly or more extensive. The other purpose of the meeting is to provide the EBL staff with a good insight in what’s happening and required in the lab.

You can always find the latest version of this “EBL starting point” at: <http://ebl.eur.nl>, click on “Lab guide for researchers and students”. Specific manuals on hardware and software can also be found in the EBL Assistant, which is available on all EBL computers.

Eating, drinking, having lunch is NOT allowed in the lab-rooms or control rooms. You can only use a bottle or cup of water within the EBL area. Plan time to have breaks during your research.

You are also responsible for the instruction, guidance and behaviour of your participants in the EBL. Tell them upfront that eating, drinking, using cellphones or talking loud is NOT allowed in the lab-area, including the waiting room.

Facilities

General

A number of facilities can be used in (combination with) any study, in any room within the lab. Think about using a microphone, loudspeakers or headphones, but also the use of equipment for recording physiological measures like heart rate or skin conductance (arousal). There is also the possibility to use E-prime button boxes to measure response times very accurately.

Furthermore, especially in the Support rooms, some facilities are available to prepare stimuli-material. Think of equipment to digitize analog audio, video and other material, as well as edit it. A more detailed list of available equipment and software can be found in annex A. If your requirements are not covered by the list, consult the EBL staff. Subject computers have a more restrictive set of available software than Support Room computers.

If you want to use the pantry just outside the lab at Mandeville T12, clean-up immediately. The pantry is part of RSM and DPECS-Psychology offices, but if used properly, users of the EBL may continue to use it.

Note that in the EBL area, only water may be consumed.

Lab rooms

waiting room

On signs/directions on the campus that mention the EBL, near to the EBL also the waiting room is mentioned. In the waiting room, 14 persons can take a seat and wait for their appointment. A remotely viewable camera is mounted in the waiting room, the image can be viewed on any computer in the lab in real time, but is never recorded.

Use the fact that the lab and the waiting rooms are mentioned on signs in the Mandeville building. Use these names in your communications with participants and avoid mentioning specific rooms. If participants all go directly (and only) to the EBL waiting room, they are not searching throughout the lab for the specific room, possible causing disturbance in some way. This construction may require you to walk some more, but will support the quality of research in general. You have the camera to monitor the waiting room.

(See: [EBL route template](#))

4-persons labs (6 labs)

Each room has 4 computers available. The tables in these labs are separated by room dividers. In one of the labs (room 6, special CRT monitors are available for the presentation of very short stimuli, up to 200Hz at a resolution of 800x600 pixels and 32-bits colours (4 billion).

The other 4-persons rooms have 24.1" TFT-IPS widescreen displays that display up to 1920x1200 pixels in a 16:10 ratio.

2-persons labs (4 labs)

Each room has 2 computers available. The tables are separated by a room divider. These rooms can be used for 2 participants, or in a situation where the researcher works with one subject together in a lab. Also, after consulting the EBL staff, the set-up of the room can be changed for special studies. All 4 rooms have 24.1" TFT-IPS widescreen displays that display up to 1920x1200 pixels in a 16:10 ratio, on both computers.

2-person labs are particularly suitable to conduct studies that require physiological measures, Biopac equipment for example can be connected to a hardware trigger port.

cubicles

Divided into 4 sections, this lab has 12 medium-sized and 16 full-sized cubicles available. In the separate supervisor room, 4 supervisor workstations are available to control all computers in the cubicles.

With several “Assistants” (computer programs) cubicle-computers can be switched on or off, but also an experiment or other data can be copied to—or controlled on— any number of cubicle-computers. Additionally, gathered research data can be easily collected (retrieved) after conducting a study, also with the help of the “Cubicle Assistant”.

All cubicle-sections have 24.1” TFT-IPS screens with a resolution of 1920 x 1200 and a ratio of 16:10. Optionally, the cubicles can be equipped with response boxes, microphones and/or USB camera’s. Headphones are standard equipment in all labs.

eeg-labs (2 labs, 1 mobile set)

EEG labs with amplifiers and caps for 32 or 64 channels. Additionally, skin conductance, heart rate and respiration can be measured. Also an option for 32 extra channels is available, to measure for example muscle contractions (EMG) in several spots. Stimuli can be presented up to 200Hz, 800x600 pixels and 32-bit colours at a 22” (50 cm diagonal) 4:3 CRT screen.

Analysis can be done with Brainproducts Vision Analyzer, of which several licenses are available in all Support Rooms of the EBL.

In EEG lab 2, optionally a Digitimer DS7A electric stimulator is available.

Usage of these specific rooms with their complex equipment will have to be guided closely by research staff supervisors and EBL support staff. See ‘Guidelines for booking’ for more details on using and booking the EEG labs and equipment.

video-labs (2 labs)

Rooms with equipment for digital audio- and video-recording, which can be uploaded to a video-conversion service or written to a DVD. In each observation rooms, up to 6 people can be seated, depending on the layout. The supervisor room is shared by both labs.

The camera’s in the observation rooms can be panned, tilted and zoomed from within the control room, where 2 sets of controllers are available.

eye tracking labs (3 labs)

In 2 adjacent rooms, 2 SMI eye trackers are available. The mobile RED-m has a 120Hz sampling frequency, the stationary RED250 system has a 250Hz sampling frequency. Separated by a room divider there is a seat for the experiment supervisor who, depending on the type of study, needs to use one or two workstations to control the eye tracker and present stimuli.

The EBL staff offers very limited support with the integration of eye tracking communication in an experiment that is built in E-prime.

Besides the SMI eye trackers, the third eye tracker room has an Eyelink 2K eye tracker available, which can sample at 1000Hz binocular or even 2000Hz monocular. Stimuli can be presented up to 200Hz, 800x600 pixels and 32-bit colours at a 22” (50 cm diagonal) 4:3 CRT screen.

Stimuli can be presented with E-prime. When however, specific interaction is needed between the eye tracker and the stimuli-program, it needs to be built in C, Perl or Python or the SR-Research Experiment Builder. The knowledge and experience needed for that is very limited within the EBL support staff.

Eye tracking in general needs a complex setup and often requires custom and complex programming and verification. The same applies to analysis, which is very demanding on users and software. The EBL staff can advise on the strategy and architecture of such an

experiment, but does not have the resources available to develop or support such experiments. If this type of setup is needed, make an appointment with the manager of the EBL to discuss this.

12-persons labs (2 labs)

These rooms have room for 12 people. There are 4 tables and 12 chairs, but no additional technical infrastructure. A computer can be placed on demand.

Paid participants

The EBL manages the EURO subject pool. This pool holds prospective participants, that are willing to participate in a study in return for a fee.

This system works in similar fashion to ERAS (DPECS-Psychology) and is of the same make as the course credit system of RSM (ERPS).

After posting a new study, participants can subscribe to it and optionally choose a time slot. At the moment the system does not offer mass mailings to prospects.

More details can be found in the section "[Administration](#)".

On-line research

Several possibilities exist to conduct on-line research. Some tools are more suited to conduct on-line questionnaires, others are more suited to full-blown on-line experiments and can even contain reaction time measurements.

On-line questionnaires can be easily built and managed by software from Qualtrics, for which the University Library manages a site-license.

Every student and staff-member with valid ERNA credentials can access and use Qualtrics at: <https://eur.nl/qualtrics>

When it is necessary to measure reaction times on-line, we have the possibility to use Inquisit from Millisecond.com. With this software, one can build an experiment-script that can be executed on a Windows or Macintosh computer, or (in unaltered form) by several supported browsers on these platforms.

The design of an Inquisit script needs a lot of attention and requires programming/scripting skills at an intermediate level. The EBL has limited expertise to support this, but is resource-wise not always able to construct complete experiments with Inquisit.

A web-license for Inquisit will need to be provided for by the researcher.

Experiments, research-data and backups

The responsibility of safe-guarding experiment files, executables, stimuli and gathered research-data is primary at the researchers own shoulders. The EBL does **not make backups** of data, but merely leaves them on the computers for the duration of the academic year. Backups are also **not** made of data at support-room computers.

During the summer period, all computers will be re-installed and all data thus will be erased from the internal harddisk(s).

A few weeks before the maintenance-period during the summer starts, each user of the EBL booking system will receive a reminder to safe-guard any data on EBL-computers.

Furthermore, for safety and stability reasons, it is prohibited to use portable data-devices in the EBL lab-rooms. This is only allowed in one of the before-mentioned Support Rooms.

So, it is of vital importance that after each day or session, you, or your assistant(s) use the “EBL Assistant” utility to upload the gathered data to our servers, after which you can retrieve the data at one of the workstations in one of the Support Rooms. You can then place it on your network drive, where it will be backed-up by your IT department, probably the following night. Alternatively, at night data will be automatically synchronized to our servers, ready for you to retrieve the next day.

It is allowed to connect a portable hard-disk or USB-stick to one of the Support Room computers. It is strongly recommended to always use encrypted portable media.

Further information about the EBL Assistant can be found in it’s help file.

Software availability

Stimuli-software

At the moment the software primarily used to run experiments in the EBL lab rooms is E-prime. In all of the lab-rooms, a run-time version of E-prime (E-run) is available, in the Support Rooms the full version (E-studio) is available to amend or develop your experiments in E-prime.

On request, Neurobs Presentation or Millisecond Inquisit Desktop Client is available for use in an arbitrary lab. Costs may be involved in this.

Furthermore, several open source Python-based experiment building-and-running environments are available in the EBL.

Analysis-software

Much of the software available in the EBL lab-rooms is also available in the Support Rooms of the EBL. To support the main purpose of the Support Rooms, development and analysis in research, also many other packages are available there.

An extensive list of all available software in both lab- and support rooms can be found in [Annex A](#)

Sometimes the software has to be installed on demand. In that case, contact the EBL staff. (See section “[Contact information](#)”)

Usage by role

General

Students are **not** allowed to work solo outside office hours. Someone from the staff needs to be in the vicinity and available when students want to use the EBL during evening hours or on Saturday. These arrangements need to be made upfront when applicable. This rule is instated for the safety of both the student and the participants.

In your communication with participants, use the fact that directions to the EBL also include directions to the EBL waiting room. (See: [EBL route template](#))

In the waiting room a camera is mounted. The image can be viewed on any computer in the lab. Experiment supervisors can easily monitor the arrival of participants in this way.

If your study contains some kind of “punch line” or manipulation that current participants should not disclose to newly arriving participants, you can have your participant use the exit-only door in the closed elevator section of the lab.

Researchers DPECS-Psychology

As stated at the start of this document, before starting a study (especially one that involves the more “technical” aspects of the EBL) consult the EBL staff, which has a lot of practical knowledge concerning the research process in general. This can be just a short checkup of the process involved and does not have to take a lot of time.

If one of your assistants or students is starting a study in the EBL, you are required to make an appointment together with them with the manager of the EBL, to discuss and coordinate what is needed from the EBL. The assistant or student is not allowed to arrange this first appointment themselves.

Furthermore, some practical things:

- Keys to all lab rooms are managed by the key cabinet close to the entrance of the EBL. A pin code is needed to access the keys, see the section on keys to find out all details on this. The PIN may not be shared among users!
- To book the EBL, request activation of your login at the administrator.
- ERAS is the place to make use of the obligatory subject hours that DPECS-Psychology student have to fulfill during their bachelor period. ERAS is part of Psyweb. (See section “[Contact information](#)”)

Researcher RSM/ESE

In case of any special wishes or demands in connection to the study you will be conducting, request a meeting with manager of the EBL.

Request a login for the booking system at the EBL staff.

This will automatically generate a PIN for the key cabinet, which will give you access to any regular lab room.

In case of questions, contact the EBL staff. (See section “[Contact information](#)”)

Information regarding the ERIM Internal Review Board can be found at the ERIM website:

<https://www.irim.eur.nl/research-facilities/internal-review-boards>

It is required to fill out the correct IRB code in every lab-reservation you make.

Follow the instructions (in red) in the EBL booking system.

PhD DPECS-Psychology

Studies are placed in ERAS by the user her/himself, they also take the role of experiment-supervisor and add themselves as such to the study.

Request a login for the booking system at the EBL staff.

This will automatically generate a PIN for the key cabinet, which will give you access to any regular lab room.

In case of questions, contact the EBL staff. (See section “[Contact information](#)”)

PhD candidate RSM/ESE

In case of first use of the EBL, or any special demands related to the study you will be conducting, request a meeting —through your supervising researcher— with the manager of the EBL. The first meeting will always have to be attended by your supervisor.

Request a login for the booking system at the EBL staff.

This will automatically generate a PIN for the key cabinet, which will give you access to any regular lab room.

In case of questions, contact the EBL staff. (See section “[Contact information](#)”)

Information regarding the ERIM Internal Review Board can be found at the ERIM website:

<https://www.erim.eur.nl/research-facilities/internal-review-boards>

It is required to fill out the correct IRB code in every lab-reservation you make.

Follow the instructions (**in red**) in the EBL booking system.

Students DPECS-Psychology

In case of first use of the EBL, or any special demands related to the study you will be conducting, request a meeting through your supervising researcher, with the manager of the EBL. The first meeting will also have to be attended by your supervisor.

Request a log-in for the booking system within Psyweb (See section “[Contact information](#)”). This will automatically generate a PIN for the key cabinet, but **not immediately gives you any access to lab rooms**. Specify which lab room(s) you will need and have your supervisor send a request to the EBL staff to assign the correct keys to your account.

In case of questions, contact the EBL staff. (See section “[Contact information](#)”)

Getting participants:

Studies can be published within ERAS by the supervising researcher from the staff. The student normally has the role of experiment-supervisor and can be added as such to the definition of the study.

Administration

Booking system

The EBL booking system is the place to reserve space and time in the lab. It is an on-line booking system which requires an ERNA-style login and password. Before you can login to the booking system, your account needs to be activated. See

“[Usage by Role](#)” on how to achieve this.

The EBL booking system (<https://booking.ebl.eur.nl>) is reachable from campus computers, or using a VPN or Remote Desktop connection off-campus.

If, for some reason, you need to contact other users of the booking system, for example to discuss a booking made by another researcher, look at the ERNA account and search for their email-address under “User list”. (upper right side)

Keys

The EBL utilizes a key cabinet to issue keys to all users.

This key cabinet is located near the entrance of the EBL and holds individual keys to all lab rooms.

Access to the key cabinet and thereby all regular lab rooms is automatically given to staff members (of both ERIM and DPECS-Psychology) who request a login for the booking system.

Students automatically receive a PIN when applying for an account for the booking system, but have to request access to specific labs through their supervisor.

Once you have acquired a key for usage, using your personal PIN, you will be held responsible for this key until you return it to the cabinet. The lab room for which you took a key, can be used subsequently by another researcher, so it is important that you return a key immediately after the period you have booked in the lab has expired. It is forbidden to take a key with you when you leave the lab area, you have to return it then. So basically this means that keys do not leave Mandeville T12.

All accesses to the key cabinet will be logged and recorded.

In case of any questions, contact the EBL staff.
(See section “[Contact information](#)”)

Participants

In the EBL, you all are going to work with participants.

Treat them fairly, also when they ask “stupid” questions or run late. You and other researchers depend on their good will.

On the other hand, do not hesitate to tell them clearly what the expected behaviour in the lab is.

Make sure you are briefing and de-briefing participants correctly, so they understand what the purpose of the study is (or was) and learn something from the experience.

To recruit participants, three on-line systems are available. Access and usage depend on your position at either DPECS-Psychology or ERIM.

ERAS

ERAS stands for “EBL Research Administration System” and it manages the obligatory subject participation hours of DPECS-Psychology students. It is embedded in the learning environment of DPECS-Psychology, <https://www.psyweb.nl>. (See section “[Contact information](#)”)

ERPS

ERPS stands for ERIM Research Participation System and it is a course credit system supported by RSM and available to all RSM researchers. Studies are placed by the researcher and have to be approved by the administrator. A login for this pool can be requested at the administrator. (See section “[Contact information](#)”)

EURO

The EURO subject pool is available to any researcher that has the possibility to pay participants. It uses the same on-line system as ERPS, but logins are managed by the EBL. Every researcher places their own experiments and also approves them. No interaction from the administrator is needed to publish studies.

Every year, a mailing is done to attract new participants to the EURO subject pool. A login for this pool can be requested at the administrator. (See section “[Contact information](#)”)

Participants are paid compensations in the order of € 7,50 - € 10,- per hour.

Guidelines for booking

In general: If you find out, before or during your study, that you have booked too much time or space, you are obliged to free up the unused resources in the booking system immediately. Your colleague-researchers will be grateful for that.

It is not allowed to “speculatively” book space and then remove your claim just before, or after you have (not) used the lab.

Availability outside office hours: Members of the staff are allowed to use the EBL outside of office hours. Technical support, however, will not be available in the evening hours and on Saturday.

But, students are **only** allowed to work in the EBL outside office hours, when a staff member is in the vicinity and available in case of emergencies.

Arrangements between students and staff should be made upfront for these occasions.

Cubicle labs

The guidelines for booking the cubicles are the following.

There are 2 sections of 6-cubicles and 2 sections of 8-cubicles and 4 supervisor workstations to support this setup.

It is not allowed to book several sections at once. The maximum booking period is one week for one section at a time.

In case the study needs a larger claim, contact your co-ordinator for cubicle reservations. See section “[Contact information](#)”.

EEG labs

Both EEG labs are heavily used, especially from March till June.

To oversee the fair use of EEG labs and mobile equipment, an EEG lab coordinator is instated. See section “[Contact information](#)”.

Fair use policy EEG labs March till June.

- Regular working hours for the EEG labs are 9:00 to 19:00, utilising time slots of two hours. Reservations (EBL booking system) must be made according to these time-slots. Each reservation between 9:00 and 19:00 starts on an odd hour (9:00, 11:00, and so on).
- Pre-reservations optionally can be made (see limitations below), but if no actual appointment with a participant is made, these pre-reservations must be withdrawn not later than 1 week before the target date. This gives other researchers the opportunity to plan a participant in the released time slot.
- A maximum of 8 (pre-)reservations (8 slots of 2 hours) per week can be made by each researcher (for each research project). This limitation can be adapted by the EBL management according to the actual demand during the given period.
- If according to the lab management and/or the research directors, a researcher does not make fair use of the EEG lab, his/her reservations will be cancelled. Access to the EEG-lab will be cancelled if this occurs more than once.

Furthermore, for new users of the EEG labs or mobile equipment, it is mandatory to first have an introductory meeting with Christiaan Tieman (tieman@essb.eur.nl) of the EBL. He will introduce rules and regulations to new users and will show how to use the most important equipment.

Contact information

Co-ordination booking

| | |
|------------------|--|
| Cubicles: | Bram van den Bergh (bbergh@rsm.nl , 010 4081968, T10-15) |
| EEG Labs: | Freddy van der Veen (veen@essb.eur.nl , 010 4088678, T13-18) |
| Video labs(Psy): | Heleen van Mierlo (vanmierlo@essb.eur.nl , 010 408 8691, T12-39) |
| Video labs(RSM): | Anne Nederveen (anederveenpieterse@rsm.nl , 010 4081898, T08-13) |
| Other labs: | ebl@essb.eur.nl |

Support

| | |
|------------------------|---|
| Keys/Equipment: | Christiaan Tieman (tieman@essb.eur.nl , 010 4089727, T12-36) |
| EURO: | Christiaan Tieman (tieman@essb.eur.nl , 010 4089727, T12-36) |
| ERPS: | Almira Abilova (erps@rsm.nl , T10-08) |
| ERAS: | ESSB Web Team (webteam@essb.eur.nl) |
| Computers: | Marcel Boom (boom@essb.eur.nl , 010 4082038, T12-34) |
| EBL Assistant: | Marcel Boom (boom@essb.eur.nl , 010 4082038, T12-34) |
| Software availability: | Gerrit Jan de Bie (debie@essb.eur.nl , 010 4088796, T12-40) |

Web locations

| | |
|---|--|
| EURO system: | https://www.eur.nl/euro |
| ERPS system: | https://erps.sona-systems.com |
| ERAS system: | https://my.eur.nl/en/essb-employee/research-o/ebl-research-administration-system-eras (Or: MyEUR ⇒ ESSB ⇒ Research ⇒ EBL research Administration System (ERAS)) |
| Booking system: | https://booking.ebl.eur.nl (available on campus or with VPN/RDC) |
| DPECS student-login request for the EBL booking system: | ebl@essb.eur.nl |
| ERIM Internal Review Boards (IRB): | https://www.erim.eur.nl/research-facilities/internal-review-boards |

EBL route template:

Please follow these directions to the EBL-waiting room.
You can only access the EBL via the South side of the Mandeville building. Take the escalator from the main entrance to the 3rd floor and walk straight on to the back of the building. Take the elevator to the 12th floor follow the signs to the waiting room where you will be picked up by the experiment leader.

For all other matters or emergencies regarding the EBL, contact
Christiaan Tieman (tieman@essb.eur.nl, 010 4089727, T12-36)

Video labs

A request for booking of one or more rooms, possibly even months upfront, can be done with one of the co-ordinators. See section "[Contact information](#)".

Other labs

All other labs can be booked independently, with the following restrictions.
No bookings longer than 4 hours and not before an appointment is made with a subject.
Not more than 4 weeks upfront.

To clarify this, to make appointments with participants, it is of course allowed to book several days and/or labs in the booking system, then immediately start making appointments and free up any unused time/labs when your "appointment-session" is finished.

Failure to do so will be recognised by the co-ordinators.

If you need a larger claim than the rules above allow, contact the management of the EBL. See section "[Contact information](#)".

Annex A

Hardware

- foot pedals, to be used with E-prime
- Serial Response Box (SRBOX), millisecond accurate responses in E-prime
- big standing or tabletop pushbutton or turn-button, to be used with E-prime.
- pushbuttons in different shapes and sizes, that can be built-in into the table-top of certain labs, to be used with E-prime and possibly other stimuli-software.
- standing lamps, webcams, video camera's
- bright white leds, to be mounted with Velcro at any position, controllable from E-prime and possibly other stimuli-software.
- tactile stimulus, vibrating fingertip-actuators.
- your special request(s)...

Special measurements: Smokerlyzer(CO), hearing-test, autonomous measures (heart rate, skin conductance), alcohol tester, light/lumen meter.

Audio/video equipment: memo recorders, audio-video editing station (digitise).

Software

EBL lab subject stations:

- Audacity 2.1.2.0
- E-Prime 2.0 Professional SP2 2.0.10356 (Runtime Only)
- Google Chrome (Latest professional version, updated every night)
- GStreamer 1.0 1.12.2
- Java 8 Update 144 (64-bit) 8.0.1440.1
- Java 8 Update 144 8.0.1440.1
- K-Lite Mega Codec Pack 13.3.5 13.3.5
- Logitech-webcamssoftware 2.51
- MATLAB R2017a 9.2 + all toolkits
- McAfee Agent
- Microsoft .NET Framework 4.6.2 4.6.01590
- Microsoft PowerPoint Viewer 14.0.4763.1000
- Microsoft Silverlight 5.1.40416.0
- Microsoft Visual C++ 2005 Redistributable 8.0.61001
- Microsoft Visual C++ 2008 Redistributable - x86 9.0.30729.17 9.0.30729
- OpenSesame 3.1.9-py2.7-win32-1 3.1.9-py2.7-win32-1
- Presentation 200072617 (On request. A License Dongle is needed)
- PsychoPy2 1.85.3 1.85.3
- Psychtoolbox-3-PTB_Beta-2017-06-11_V3.0.14 (Matlab)
- PyGaze-0.5.1

Support Rooms:

- 7-Zip 16.04 (x64 edition) 16.04.00.0
- AcqKnowledge_4.1
- Adobe Illustrator CC 2017 21.1.0
- Adobe Photoshop CC 2017 18.1.1
- Adobe Premiere Pro CC 2017 11.1.2
- AdobeCCPhotoMovie 1.0.0000
- Audacity 2.1.2.0
- BrainVision Analyzer 2.1.1 2.1.1
- ELan 4.9.4
- EndNote X7 17.4.0.8818
- E-Prime 2.0 Professional SP2 2.0.10356
- Google Chrome (Latest professional version, updated every night)
- GStreamer 1.0 1.12.2

- IBM SPSS Statistics 23 23.0.0.0
- IBM SPSS Statistics 24 24.0.0.0
- JASP v0.8.4
- Java 8 Update 144 8.0.1440.1
- K-Lite Mega Codec Pack 13.3.5 13.3.5
- Logitech-webcamssoftware 2.51
- MATLAB R2017a 9.2
- McAfee Agent
- Microsoft .NET Framework 4.6.2 4.6.01590
- Microsoft Office Professional Plus 2016 16.0.4266.1001
- MLwiN 2.36 2.36.0.0
- Multiple Image Resizer .NET 4.5.2 4.5.2.2
- National Instruments Tools + Engine
- LabVIEW 8.6.1 8.6.426.0
- Notepad++ (64-bit x64) 7.5
- OpenSesame 3.1.9-py2.7-win32-1 3.1.9-py2.7-win32-1
- paint.net 4.0.18
- Presentation 200072617 (On request. A License Dongle is needed)
- PsychoPy2 1.85.3 1.85.3
- Psychtoolbox-3-PTB_Beta-2017-06-11_V3.0.14R for Windows 3.4.0 3.4.0
- PyGaze-0.5.1
- RStudio 1.0.143
- SMI Experiment Suite 3.7.68 (On request. A License Dongle is needed)
- SPM12 R6906
- WinMorph v3.01