



# CENTER FOR RESEARCH IN COGNITION & NEUROSCIENCES THE ULTIMATE BOOKLET

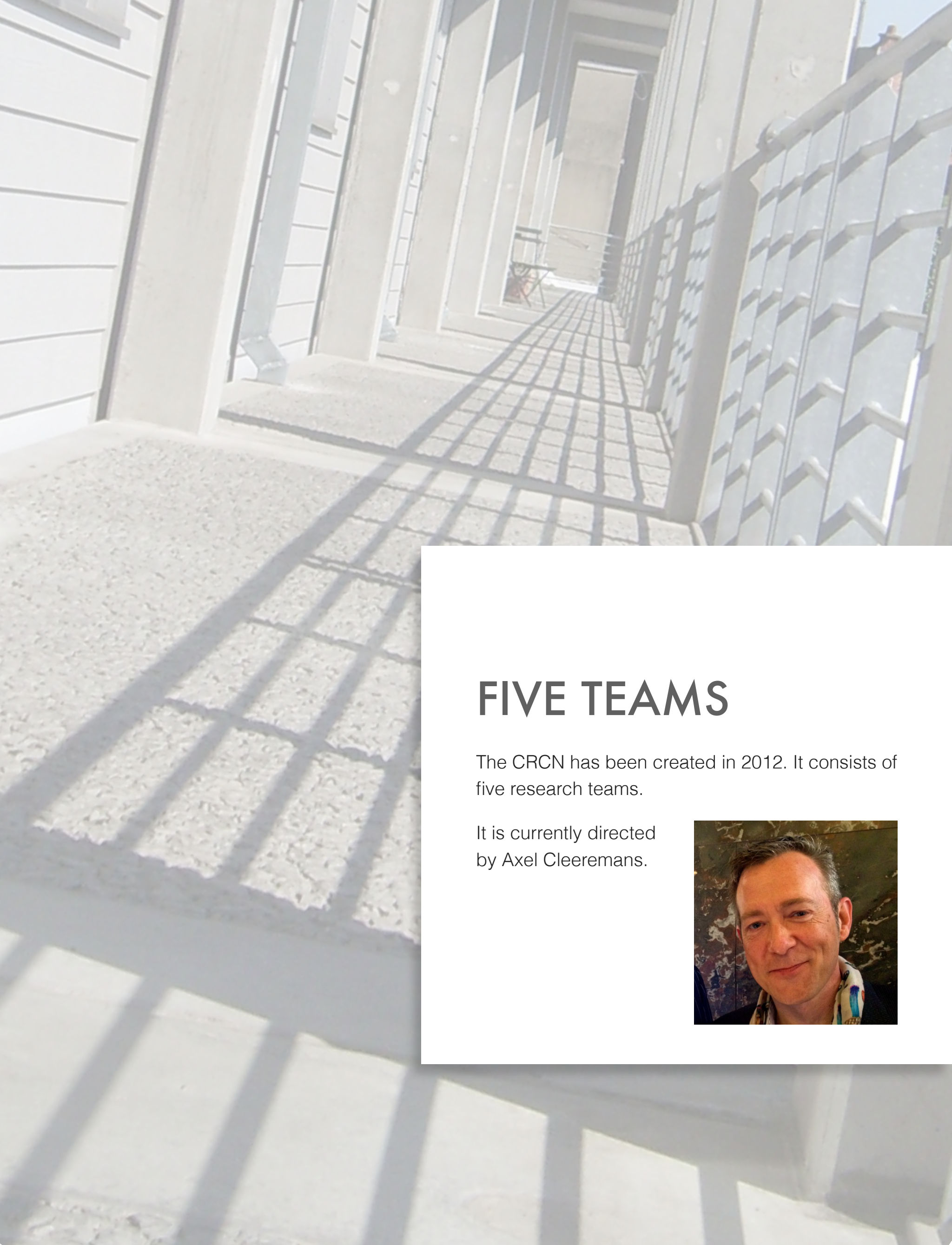
NOVEMBER 2018



**ULB**



CENTER FOR RESEARCH IN  
COGNITION & NEUROSCIENCES



## FIVE TEAMS

The CRCN has been created in 2012. It consists of five research teams.

It is currently directed by Axel Cleeremans.





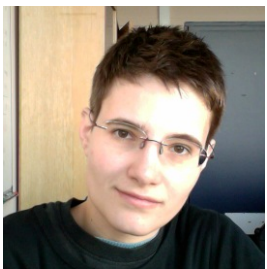
### **Action, Bias and Control Group - W. Gevers**

- Working Memory
- Numerical cognition
- Decision making
- Subjective experience
- Conflict adaptation



### **Consciousness, Cognition and Computation Group - A. Cleeremans**

- Consciousness
- Visual awareness
- Statistical learning
- Decision-making
- Computational modelling



### **Laboratoire Cognition Langage et Développement - F. Chetail**

- Reading
- Dyslexia
- Numerical cognition
- Deafness
- Approximate Number System



### **Unité de Recherche en Neurosciences Cognitives - R. Kolinsky**

- Reading
- Reading acquisition
- Literacy effects
- Dyslexia
- Auditory training



### **Neuropsychology and Functional Imaging Research Group - Ph. Peigneux**

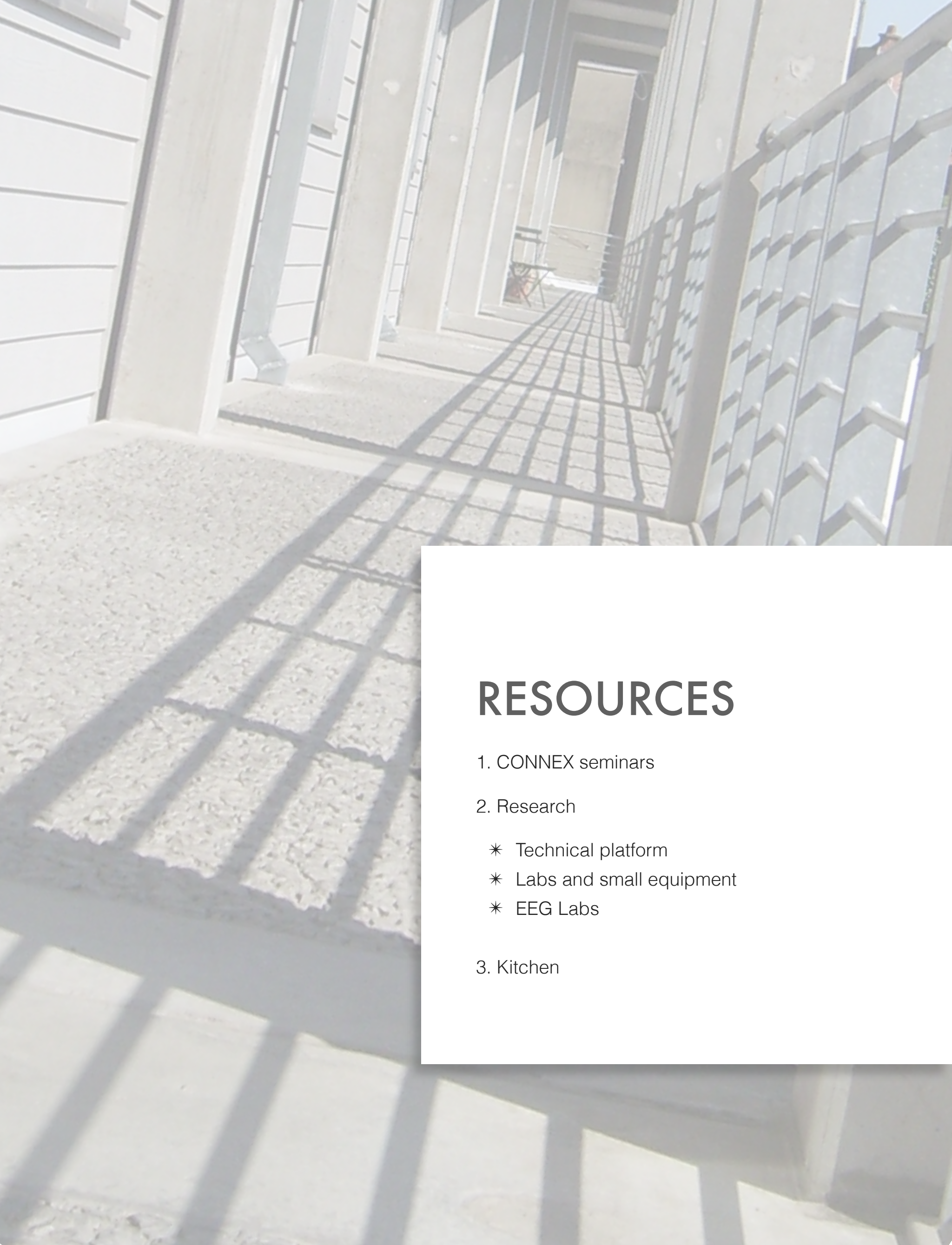
- Neuroimaging
- Sleep and biological rhythms
- Learning and Memory consolidation
- Attention-activity (ADHD), epilepsy and MS disorders
- Cognitive fatigue



**WHO'S WHO**

Last Name	First Name	Tel	Status	Team	Office
Achoui	Dalila	4049	PhD student	CO3	DB10 241
Albajara Saenz	Ariadna	4262	PhD student	UR2NF	DC10 130
Alegria	Jesus	2638	Emeritus	LCLD	DC10 212A
Antoine	Sophie	6649	Postdoc	AB&C	DC10 220
Archambeau	Kim	6649	PhD student	AB&C	DC10 218
Baijot	Simon	2640	Teaching assistant / Scientific collaborator	UR2NF	DB10 134
Benkirane	Oumaïma	4812	PhD student	UR2NF	DB10 237
Beauny	Arnaud	4072	PhD student	CO3	DB10 243
Bernacki	Angélique	2631	CRCN Admin	All	DC10 125
Bertels	Julie	2633	Prof / Scientific collaborator	CO3	DB10 136
Borguet	Virginie	4581	Academic Admin	All	DB10 156
Bourguignon	Mathieu	2645	Postdoc	LCLD	DC10 117
Camara Lopez	Maité	4812	Scientific collaborator	CO3	DB10 237
Caspar	Emilie	3295	Postdoc	CO3	DB10 138
Charlier	Brigitte	3698	Prof	LCLD	DC10 121
Chatelain	Marie	4812	PhD student	UNESCOG	DB10 237
Chetail	Fabienne	3621	Prof	LCLD	DC10 110
Cleeremans	Axel	3296	Prof	CO3	DB10 140
Cogliati Dezza	Irene	3295	PhD student	CO3	DB10 138
Colin	Cécile	2539	Prof	UNESCOG	DC10 222A
Content	Alain	4227	Prof	LCLD	DC10 106
Couvignou	Manon	4858	PhD student	UNESCOG	DB10 146
Culot	Catherine	6649	PhD student	AB&C	DC10 220
De Heering	Adélaïde	4049	Postdoc	CO3	DC10 241
Destrebecqz	Arnaud	4231	Prof	CO3	DC10 210
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Gaillard	Vinciane	3622	Research Logistician	All	DB10 147
Genin	Sophie	4812	PhD student	UR2NF	DB 10 237
Gevers	Wim	4228	Prof	AB&C	DC10 123
Guillaume	Mathieu	2031	Postdoc	LCLD & AB&C	DC10 108
Hage	Catherine	3698	Prof	LCLD	DC10 121
Hendryckx	Charlotte	2031	PhD student	LCLD	DC10 108
Isselé	Joanna	2607	PhD student	LCLD	DC10 112

Last Name	First Name	Tel	Status	Team	Office
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Lechat	Josiane	3698	Researcher	LCLD	DC10 121
Leybaert	Jacqueline	2632	Prof	LCLD	DC10 214
Maenhout	Christelle	4262	PhD student	UR2NF	DC10 130
Martin	Jean-Rémy	4072	Postdoc	CO3	DB10 243
Morais	José	2638	Emeritus	UNESCOG	DC10 212A
Munoz Moldes	Santiago	4067	PhD student	CO3	DC10 241
Patout	Pierre-André	2641	PhD student	LCLD	DC10 115
Peiffer	Anna	4262	PhD student	UR2NF	DC10 130
Peigneux	Philippe	2639	Prof	UR2NF	DB10 144
Resier	Frédéric	6752	Technician	Faculty	DB10 245
Roshchupkina	Lillia	4812	PhD student	UR2NF	DB10 237
Schmitz	Rémy	4858	Teaching assistant / Scientific collaborator	UR2NF	DB10 146
Serlet	Sébastien	4858	Scientific collaborator	CO3	DB10 146
Seyll	Lola	2607	PhD student	LCLD	DC10 112
Sifuentes	Rebeca	4262	PhD student	UR2NF	DC10 130
Smejkalova	Anezka	2607	PhD student	LCLD	DC10 112
Slama	Hichem	2640	Teaching assistant / Scientific collaborator	UR2NF	DB10 134
Strauss	Mélanie	4262	Postdoc	UR2NF	DC10 130
Stuyck	Hans	4067	PhD student	CO3	DC10 241
Thomas	Nathalie	2607	Teaching assistant/PhD student	LCLD	DC10 112
Urbain	Charline	4549	Prof	UR2NF	DB10 132
Van Den Driessche	Charlotte	2633	PhD student	CO3	DB10 136
Van Rinsveld	Amandine	2031	Postdoc	LCLD & AB&C	DC10 108
Vande Velde	Michaël	2641	PhD student	LCLD	DC10 115
Vidal	Camille	2607	PhD student	LCLD	DC10 112
Vuillaume	Laurène	4067	PhD student	CO3	DC10 241



# RESOURCES

1. CONNEX seminars

2. Research

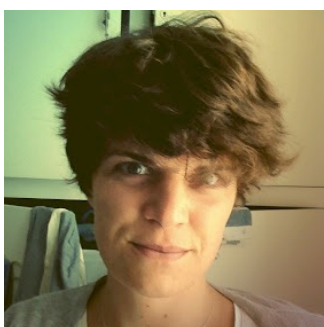
- \* Technical platform
- \* Labs and small equipment
- \* EEG Labs

3. Kitchen



## CONNEX SEMINARS

CHARLOTTE VANDENDRIESSCHE



JOANNA ISSELÉ



CONNEX seminars address any aspect of cognitive psychology, psycholinguistics, neuropsychology, philosophy, ethology or linguistics. These seminars are therefore an appropriate moment to disseminate scientific knowledge, to stimulate curiosity and discussions. They can be held either in French or English (check the title and abstract). The seminars are free and open to any member of the academic community (undergraduate, graduate and PhD students, post-doctoral researchers, academic researchers, interns).

The CRCN organizes two kinds of seminars: CONNEX seminars wherein external guests present their new findings, and CRCN internal seminars wherein CRCN members present their own data.

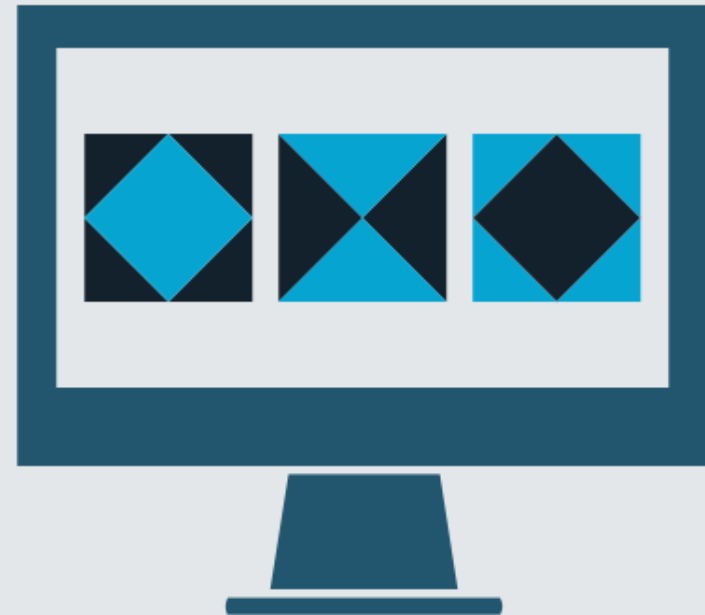
Seminars usually last around 45 min, followed by a discussion of 15 min. They usually take place on Wednesdays at 12:15 in room Bertelson (DB10.233).



# RESEARCH - TECHNICAL PLATFORM

## 01 / Behavioural Research Facilities

The CRCN features an integrated research plateau with standard and homogeneous computerized equipment for behavioural testing in dedicated lab rooms. We have several individual booths as well as a larger facility that makes it possible to test up to 8 participants simultaneously. Most experimental paradigms that exclusively involve behavioural measures, such as reaction time or accuracy, can be deployed on these simple workstations. Such paradigms may concern different domains of cognitive or social psychology, e.g., memory, implicit learning, psycholinguistics, priming, or cognitive control. Some paradigms (i.e., subliminal priming) require more stringent test conditions and are typically deployed in booths that offer specialised screens, individual testing, as well as control over illumination.



## 02 / BabyLab



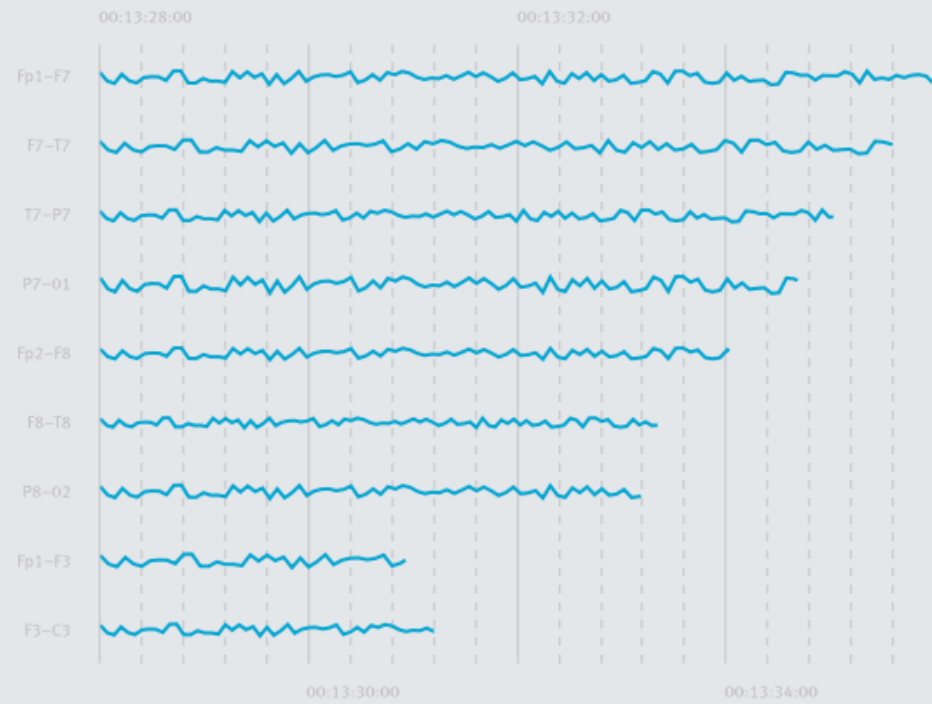
The BabyLab is dedicated to cognitive research in infants. It mainly uses video recording, audio and video stimulus delivery and head orientation techniques.

For more information visit the [BabyLab website](#).

# RESEARCH - TECHNICAL PLATFORM

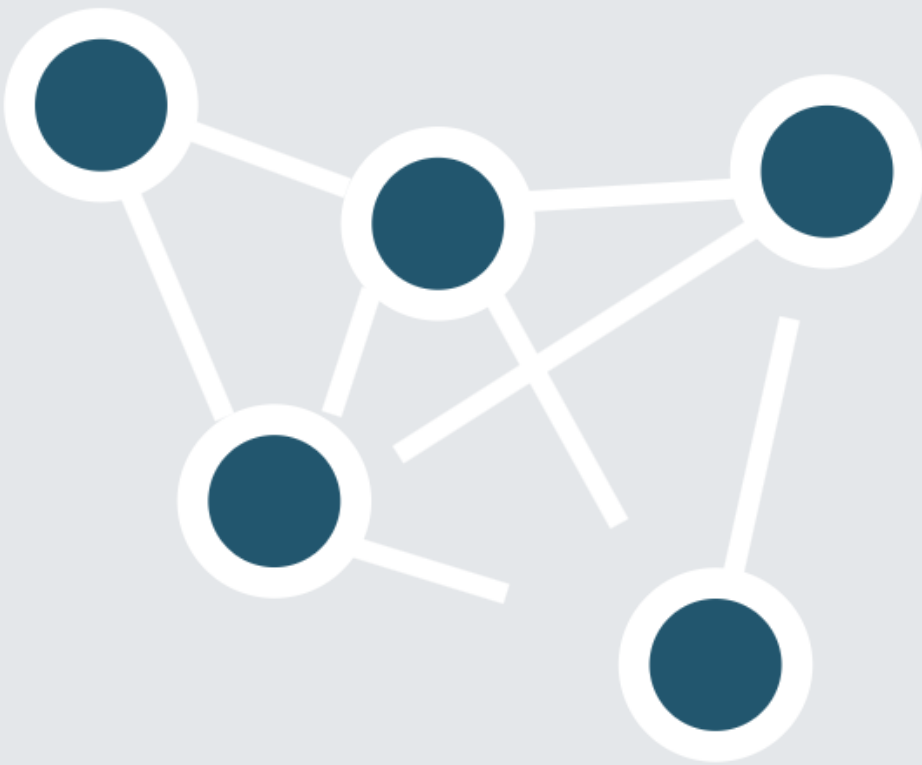
## 03 / EEG Sleep Laboratory

The EEG/sleep laboratory is installed in an insulated room (Faraday, soundproof cage with air conditioning system) with the necessary equipment to conduct long-term recordings without disturbing participants (video-monitoring, stimulus delivery, insulated interfaces, adapted bed, etc.). An advanced biopotential measurement system suitable for high-quality EEG/ERPs and EMG measurements recording (64-channels Biosemi Active ®) equips the laboratory, and is in use in various electrophysiology paradigms.



## 04 / NIRS Laboratory

The CRCN possesses an optical brain imaging Brainsight ® NIRS system. Near-infrared spectroscopy [NIRS] is a non-invasive functional neuroimaging technique that uses the properties of infrared light diffusion. NIRS detects changes in blood oxygenated and de-oxygenated haemoglobin levels that reflects variations in brain activity at the cortical level. Our NIRS system features 8 light emitting sources and 32 light detectors (optodes), allowing adequate coverage or neural activity in several regions of interest at a time, both in healthy participants and in populations with specific diseases.



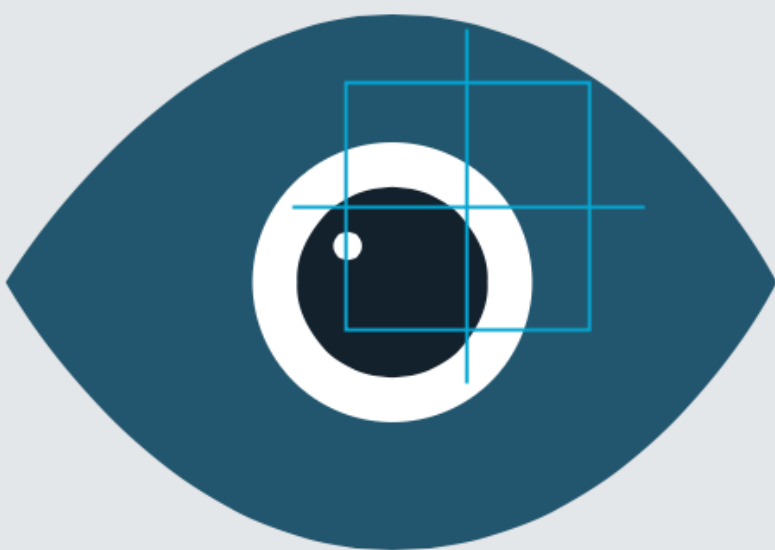
# RESEARCH - TECHNICAL PLATFORM

## 05 / tDCS Transcranial Direct Current Stimulation

Non-invasive electrical brain stimulation techniques use weak currents to modulate brain excitability, allowing non-invasive brain stimulation in various settings (e.g. sleep). The CRCN possesses a neuroConn ®DC-STIMULATOR PLUS usable for transcranial Direct Current Stimulation (tDCS), transcranial Alternating Current Stimulation (tACS) and transcranial Random Noise Stimulation (tRNS).



## 06 / Eye Tracking

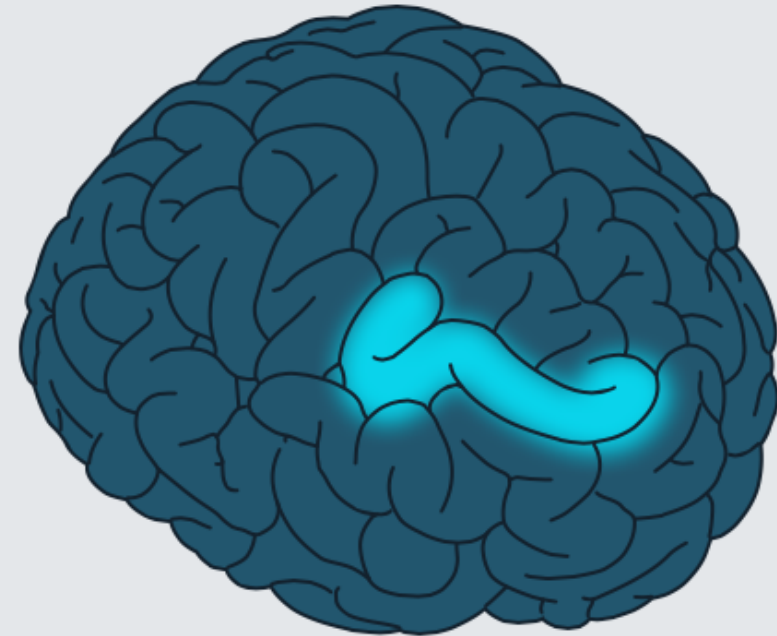


The CRCN possesses an eye tracking system (Eyelink 1000 with remote camera; SR research ®) allowing the analysis of eye movements and pupil dilation during cognitive tasks. Oculometry provides important information about which aspects of a stimulus participants are paying attention to. Analyzing the dynamics of eye movement trajectories also makes it possible to reconstruct how a participant explored a visual scene. In other cases, eye tracking data is used in real time to control what a participant can and cannot see, for instance by removing a stimulus as soon as the participant's eyes saccade towards it.

# RESEARCH - TECHNICAL PLATFORM

## 07 / MRI Magnetic Resonance Imaging

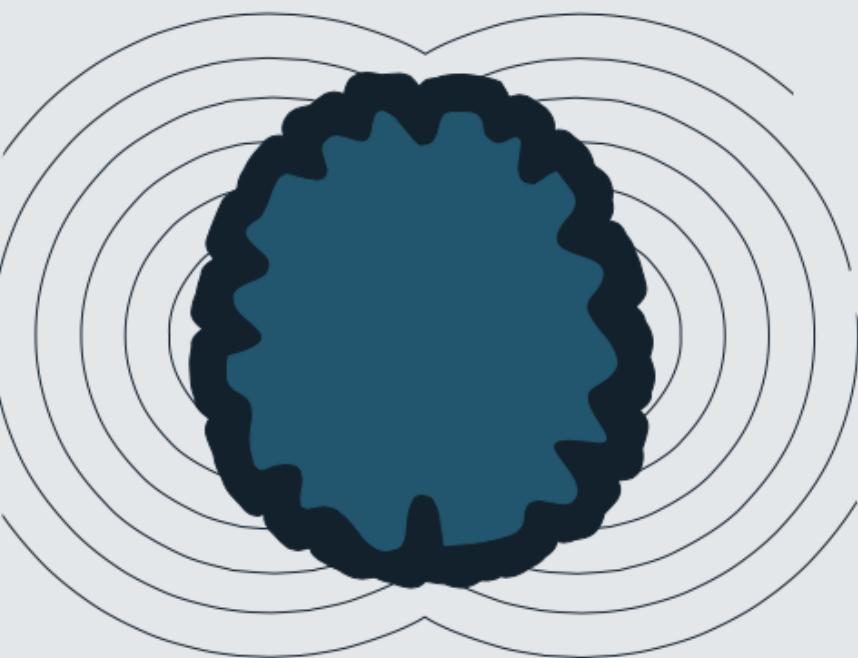
Functional Magnetic Resonance Imaging (fMRI) measures changes in blood oxygen level-dependent (BOLD) responses that reflect local variations in brain activity, in the whole brain. The 3-Tesla Philips Achieva MRI scanner available at the Erasme University hospital is equipped with high-quality MR-compatible video-audio stimulation and response interfaces (fORP® optical keyboards allowing 10 simultaneous key presses), as well as an eye tracking system (ASL® Long-Range R6LRO E6000).



## @ ERASME

## 08 / MEG Magnetoencephalography

Magnetoencephalography measures the tiny magnetic fields resulting from electrical neural activity, at the scale of the millisecond. The Elekta® Neuromag system available at the Erasme Hospital's [MEG unit](#) features 306 channels and is equipped with MEG-compatible video-audio-tactile stimulation and response interfaces (fORP® optical keyboards), as well as an eye tracking system (ASL® Long-Range R6LRO E6000).



# RESEARCH - LABS AND SMALL EQUIPMENT

The CRCN is equipped with several labs. The use of most of them is restricted to CRCN members only. Members of the CRCN also have access to two other labs.

## 1. CRCN only labs

Lab 1 (DC10-102a) with 4 mini-macs

Lab 2 (DC10-205) with 4 mini-macs

Lab 3 (DC10-206a) with 3 mini-macs

NIRS Lab (DC10-101)

New Eye Tracking Lab (DC10-103)

EEG Lab (DC10-204) with a Faraday Cage

EEG2 Lab (DC10-209a)

ULBabyLab (DC10-206) with an eye-tracker

Perception Lab (DC10-212) with 2 mini-macs and CRT monitors

Sleep Lab (DC10-213)

## 2. Other labs

Faculty Lab (DC10-209) with 2 mini-macs

Info Lab (DB8-156) with 8 mini-macs

## Warning

EEG, EMG and NIRS studies require the use of equipment that is both expensive and fragile. Therefore fees have to be paid to conduct such studies. Specifics on the EEG studies can be found in the next section. For

NIRS studies, please contact Philippe Peigneux.

## Badges

Researchers and supervised MA students (working on their thesis project or research internship) have access to the labs via their personnel or student ID card (check with Angélique Bernacki to activate it).

## Managing labs and small equipment

GRR is an online platform devoted to book labs and/or small equipment (recorder, microphone etc):

<http://unesco.ulb.ac.be/grr/login.php>

CRCN members can get a GRR account (see Angélique Bernacki). Students can check the availability of labs and/or small equipment, but are not allowed to book anything on their own.

Login : ETUDIANT / Password: etudiant

## Interns room - DB10-247

Research interns have access to a dedicated room equipped with minimacs. A badge is needed to enter the room. They are expected to maintain this room tidy and to respect the equipment (see the 6 commandments).

# RESEARCH - THE SIX COMMANDMENTS OF THE LABS

## 1. Inform

Use the door-poster to inform other people that the lab is currently being used. When you leave the room, use it also to inform other people that the room is available

## 2. Observe

Notice and report any problem with the room and/or the computers:

- Any problem with the room (untidiness, chairs, tables, missing mice, disconnected monitors etc): report to Catherine Culot
- Any technical problem with the computers: report to Frédéric Resier

## 3. Respect

- Respect the equipment: Keep in mind that it is your equipment.
- Be quiet: Some studies are attention-demanding. Other studies involve pre/post effects of napping. Please be quiet so that participants can either concentrate on their task or sleep without disruption in their sleep cycle.

## 4. Think about the future

When you leave the room, make sure that it is tidy, with connected mice, keyboards, monitors and computers, with enough tables, chairs etc. Do not leave mugs, glasses, books etc. The lab should be ready to be used right away by the next user.

## 5. Do not borrow

Equipment has been disappearing a lot lately. It is not allowed to change the configuration of the labs. Do not borrow any equipment.

## 6. Do not use USB sticks

Use NESTOR (ULB secured server where you have a personal data storage capacity)

Finder > Go > Connect to Server > enter the following:

smb://nestor.ulb.ac.be/netID

login = your netID

password = your password

# RESEARCH - EEG LABS

**NOTE 1: This is only an introductory note to the rules of use of the EEG labs. For the full version, please see the manuals.**

This document is for CRCN researchers. In the following, “researcher” means Ph.D students, post-docs, academics. For students, see point 7.

There are three dedicated rooms for EEG at CRCN, each equipped with a different system: Biosemi, Morpheus, and BrainAmp.

Brief details about the available facilities:

- EEG Lab (DC10-204): Biosemi 64 channels, external EOG electrodes, EMG, Faraday cage
- EEG2 Lab (DC10-209A): BrainAmp Acti cap system, 64 channels.
- Sleep Lab: Two ambulatory Morpheus system 24 + 8 (bipolar) electrodes, mostly dedicated to polysomnography and sleep studies

NB: Two remote EEG systems are also available in the CO3 and AB&C labs.

## **POINT 1 - How to use the CRCN EEG facilities?**

A) If not already done, I apply to be a member of the EEG user group by sending an email to [biosemi.room.crcn@gmail.com](mailto:biosemi.room.crcn@gmail.com)

B) I get in touch with the person in charge of the system I would like to use (BrainAmp, Biosemi, Morpheus).

- BrainAmp: A researcher who wants to conduct an EEG/EMG/EOG study at the BrainAmp room must contact Fabienne Chetail ([fabienne.chetail@ulb.ac.be](mailto:fabienne.chetail@ulb.ac.be))
- Biosemi: A researcher who wants to conduct an EEG/EMG/EOG study at the Biosemi room must send an email at [biosemi.room.crcn@gmail.com](mailto:biosemi.room.crcn@gmail.com)
- Morpheus: A researcher who wants to use a Morpheus system in the Sleep Lab or in ambulatory context must contact Philippe Peigneux ([Philippe.Peigneux@ulb.ac.be](mailto:Philippe.Peigneux@ulb.ac.be)).

Being a member of the EEG user group means that:

- You know the rules of use of the EEG rooms
- You comply with these rules
- You take responsibilities on a turnover basis (see Point 8)
- You will receive emails from the EEG user group mailing list

In return:

- You will be provided with all information necessary to use the labs (whether you are a novice or expert user)
- You will enjoy testing in a well-organized, efficient, and clean environment, with nice colleagues

## POINT 2 - What if I am a completely new user?

A new user is somebody who has never conducted an EEG/EMG/EOG experiment on his/her own or who has very little experience. He/she must first read the relevant documents, manuals, videos to learn – at a theoretical level – how to use the EEG systems and to learn the basic rules of use. If you plan to use the BrainAmp room, you will have to pass a test to ensure that you have reached a desired level of knowledge on these issues.

Additionally, you'll need a mentor to learn, at a practical level, how to use the EEG systems. The mentor can be either an EEG-qualified colleague in the framework of a formal collaboration, or an EEG-qualified colleague who kindly agrees that you attend his/her testing sessions as an observer. You will need to practice under the supervision of a EEG-qualified user before running experiments on your own.

If you are an experienced user, but you have never run experiments at the CRCN, you should consider attending to testing sessions of another user to figure out how things work here.

## POINT 3 – What must I do BEFORE running an EEG/EMG/EOG study?

1. Whether you are a novice or an expert, you must read the documents and manuals about the rules of use of the rooms and about the EEG system (1 manual for the Biosemi system, 1 for the BrainAmp system, 1 for the Morpheus/sleep lab)
2. You have to fill the form 'EEG study form.doc' and email it to the person in charge of the EEG room you would like to use as well as An-

gélique Bernacki ([abernack@ulb.ac.be](mailto:abernack@ulb.ac.be)). This makes several things possible:

- You show that you know that there is a cost when you use the EEG rooms:
  - \*10 euros / participant if you use the caps (32 or 64 electrodes, ribbon cables)
  - \*5 euros / participant if you use only external electrodes (e.g., EMG, EOG) or separate electrodes (Sleep Lab)
- You compute in advance how much your experiment will cost (estimation of the number of participants who will be tested)
- The person in charge of the EEG room and Angélique are informed of your study

## POINT 4 – What must I do DURING my EEG/EMG/EOG study?

Overall, you have to follow the general procedure explained in the manual of the system associated to one of the rooms. This means that you have read the manual of the room in which you are going to test and that you comply with its rules. This includes:

- Procedure to record EEG signal
- Use of softwares and hardwares
- Use of consumables (gel, tape, towels,...)
- Storage of data on acquisition and simulation computers
- Knowledge of safety issues
- Anticipation of lacking consumables
- Completion of the log book (in the room) for each participant with their name/ experiment, any remarks about problems with the system, etc.



## **POINT 5 – What must I do AFTER my EEG/EMG/EOG study?**

You have to follow the procedure of each room to report the end of your study (for further details see manuals). The person in charge of the EEG room and Angélique are informed about the end of my study.

When you publish data collected in the room, you have to mention in the paper that the study was conducted partly thanks to a FNRS grant for the EEG system and equipment of interest (see Angelique for details).

## **POINT 6 – Booking an EEG room**

- To book a room, you have to use the GRR system and follow its rules of use
- You are not allowed to book a room in advance (i.e., without an identified participant): booking is done only when you have a participant ready to participate
- In case you have long EEG sessions or rooms are already booked but you need to test, talk with your colleagues: it is often possible to find an arrangement!
- 

## **POINT 7 – What about students?**

The current philosophy is to severely control EEG testing done by students (i.e., Master students doing a master thesis, an internship, or taking part in research lessons – séminaire de recherche). The reason for these reservations are that it is very difficult to make them responsible for the equipment and cleanness of the rooms. The big

majority of them is here to collect data for their thesis or report, and will leave in few months. On the contrary, CRCN researchers need efficient EEG systems whatever the moment. This is particularly crucial for those who almost entirely rely on EEG/EMG/EOG for their Ph.D or post-doc and those who obtain grants for EEG projects.

Thus, be aware that if a student is using the EEG material in the framework of one of your research of project, YOU – as researcher – are always responsible for any problem that might arise (including financial costs in case of damage). Close and real supervision from your part is expected!

1. Room with the Biosemi system and Sleep Lab: students are only allowed to use these rooms and the EEG equipment after proper training with a qualified CRCN EEG user. Students' activities are conducted under the full responsibility of a previously identified CRCN supervisor (who must agree to assume any damage).
2. Room with the BrainAmp system: We highly recommend that students do not use the room. The only exception is if you, as supervisor of their research, are able to provide a VERY VERY CLOSE supervision of the EEG testing. This means that:
  - You are present when the participant is prepared for the experiment
  - You are present when the experiment starts
  - You are present at the end of the session, when electrodes are removed, cleaned, and everything tidied
  - You fill yourself all the relevant files (see Point 4 and EEG manuals)

**WARNING! This is true for EACH participant tested !!**

3. If you want a student to test:

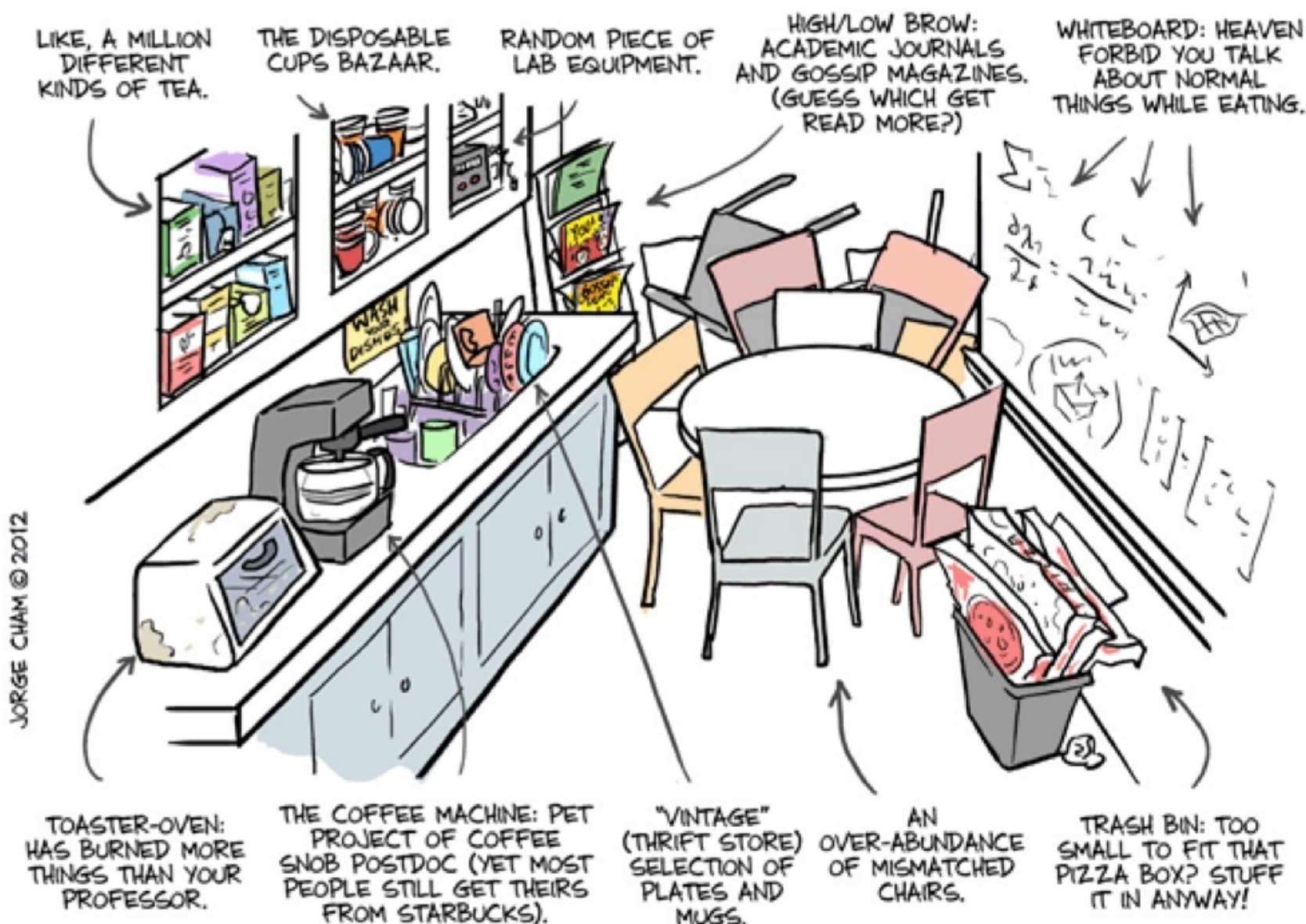
- You must be an experienced EEG user to be able to supervise and train him/her
- The student must also be a member of the EEG user group and sign the documents to be allowed to test.
- You follow Points 3, 5, 6
- You ensure that you and your student follow Point 4
- You take upon yourself the EEG costs
- You are responsible for anything your student could do wrong

### **POINT 8 – Responsibilities**

In being a user of the EEG rooms, I accept that I take from time to time responsibilities on a turnover basis. Taking responsibilities includes to check that things are tidied in the room and on the computers, to remove things lying around, to empty trash, to sweep if necessary, to anticipate the lack of consumables. See with the person in charge of the room for the modalities regarding responsibility sharing.

# THE LAB/OFFICE BREAK ROOM

KEEP IT CLEAN OR INCUR THE WRATH OF THE OFFICE ADMINISTRATOR!



WWW.PHDCOMICS.COM

title: "The Lab/Office Break Room" - originally published 9/28/2012

## KITCHEN

What else can we say?

Please clean up after the use of the kitchen.

PS: Nowadays, even two-year olds know how to use a dishwasher, so no more excuses...



**SONA**

<https://ulbpsycho.sona-systems.com>

# SONA

**NOTE: This is only an introductory note to the SONA system. For the full version, please contact the SONA team: [sonaulb@gmail.com](mailto:sonaulb@gmail.com)**

Sona is a cloud-based participant management software, that helps you setting up studies, recruiting participants, and managing credits participation, with the following features:

- Ability to restrict eligibility based on past participation in other studies, and manage study schedules
- Participants can sign up for studies they qualify for on the system, and are alerted of their upcoming study appointments by email
- From September 24, 2018 until May, 2019

## Who is entitled to get a SONA account?

Only researchers (corps scientifique et corps académique), who work at least half-time. For newcomers and researchers who did not use SONA last year, attending the info session is mandatory.

## Credits

By default, each researcher gets 200 credits in September. The SONA team evaluates the situation in January, and potentially redistributes another round of credits.

- 1 credit = 20 min
- 25 min = 2 credits
- 1 study = 6 credits max

It is possible to give your credits to students, but only through your SONA account.

You can also give your credits to other researchers who need it. Please keep the SONA team updated: We will subtract those credits from your 200 credits stock.

SONA is for credit studies only (no paid studies via SONA).

## Types of studies allowed

- Standard, behavioral, non-invasive studies allowed (experiments, questionnaires...)
- Non-invasive EEG, EMG, EOG, fNIRS studies allowed under specific conditions only.
- Skin conductance or cardiac rhythm recordings allowed under specific conditions only
- Studies conducted using these techniques in the framework of the SONA system need Ethics approval. For any enquiry, please contact the faculty ethics committee (send an email with "Avis éthique SONA" as subject to [Ethique.psychologie@ulb.ac.be](mailto:Ethique.psychologie@ulb.ac.be))
- No fMRI, MEG or TMS studies whatsoever
- The studies must take place on the Solbosch campus

## Different studies can be set up in the system

1. Standard Study
2. Multi-Part Standard Study (up to 4 parts)

3. Online Internal Survey Study

4. Online External Study

### Online External Studies

- We checked for LimeSurvey and the integration is finally working with the latest version of LimeSurvey4
- Best testing this feature before using it for real
- Other option: running online studies at a specific timeslot, in the faculty IT room
- This ensures you can check the students ID
- In that case, select 'Standard study' instead of 'Online External study'
- Don't forget to check the IT room schedule and to book it

### Careless responding

It is an issue in any study but even more so in online studies (about 10% according to the few available studies out there, see e.g. Mead & Craig, 2012). Solutions that will reduce but not eliminate careless responding are the following:

- Organize the study in the lab
- Shorten your survey
- Ask identifying information (i.e., email and nothing else) at the beginning of the study (if you do so, you have to indicate that you will make the data anonymous before data analysis)
- Use at least 3 instructed response items (e.g., « To monitor quality, please respond with a two for this item ») throughout your survey to identify careless responders and eliminate them before data analysis.

### Procedure

1. Create a new study, with a clear study name (avoid 'Experiment 1' etc)
2. Write a clear and concise debriefing report (1 page max). Please be didactic, it must be understandable for BA1 students whose knowledge about cognitive neurosciences is almost null.
3. Send it to the SONA team:  
[sonaulb@gmail.com](mailto:sonaulb@gmail.com)
4. Wait for your study to be approved
5. Plan in advance (by default, 2 business days before your study starts. There is no chance to have your study approved for Monday, 9 AM, if you send the request for approval on Friday, 5 PM)
6. When the study is approved and active, it will be visible to participants
7. Be sure you have a stock of SONA participation forms (Virginie Borguet)
8. Check your schedule twice a day (as participants can still sign up until 6 hours before the appointment)
9. Check the student ID of participants before the study is conducted
10. Not the expected participant? He/she cannot participate and you have to keep the SONA team informed
11. Grant credits to the participants via the SONA system
12. Send the the debriefing note (via the 'Contact Participants' option in the Study Menu). It is not possible to attach any document and/or use figures. Alternatively, you can put them on a separate server and put the url link in your debriefing note.

## Grant credits

If the student doesn't show up or comes very late, there are 3 options:

- Excused no-show = no penalty
- Unexcused no-show = 3 credits penalty (regardless of the amount of credits related to the study)
- 3rd way: you schedule another appointment and credit the participant after his/her participation

For Multi-part studies: penalize only once: all in all, the overall result for an unexcused no-show to a particular multi-part study should be -3 credits if the participant did not show up in at least 1 timeslot. Even if he/she participated to one of the sessions, he/she should not be granted for that because you cannot use these partial data (in that case you set it to 'excused no-show'). On the other hand, you cannot set -3 credits twice or thrice, because then an absence to a multi-part study would cost more than to any other study.

## SONA is not the ethics committee

For ethical reasons, in some cases, an immediate debriefing is still needed (studies involving deception, stressful situations, amoral stimuli...). In those cases, participants should always be able to provide feedback about their experience as subjects.

SONA rules do not prevail over standard ethical rules.

## Rights and duties - Researchers

- Researchers must show up on time
- In case you can't be present at the appointment, there are several options :

- Someone else conducts the study on your behalf
- You contact all participants at least 24h before the appointment via SONA to reschedule
- Recommended: you also contact them on their cell phone (often indicated)
- Absent researcher / study not ready etc., the participants are entitled to earn the credits related to the study

## Rights and duties - Participants

- Participants have the right to attend the study without actually participating and/or to interrupt the study before its term
- BUT solely with a solid reason (ex. the study involves spider pictures and the participant has a phobia of spiders, or because of his/her beliefs does not want to answer specific questions in a survey...)
- All students must have equal access to available experiments
- You cannot screen participants based on age, laterality, language etc
  - alternative way: specify in the detailed description of the study that you are seeking left-handed participants, French native speakers preferably
  - if a participant who does not match those criteria comes anyway, you have to let him/her participate to the study (even if you do not take his/her data into account) + give him/her the credits

## Don'ts

- Do not begin your study if you are not ready
- Do not accept a participant who is not scheduled

- Do not be late. Punctuality is required both from students and from researchers
- Do not use a USB stick in the experiment rooms: Use NESTOR instead. It is a ULB secured server where you have a personal data storage capacity.

Finder > Go > Connect to Server > enter the following:

smb://nestor.ulb.ac.be/netID

login = your netID

password = your password

## **Tutorial**

<https://www.youtube.com/watch?v=ec8S3xfO-a8>

## **SONA is not for paid studies**

You can recruit participants for paid studies via the Facebook Public Group named 'Je fais avancer la science en participant à des expériences rémunérées'

## **The same general rules apply to paid studies:**

- Book your room and/or equipment in advance via GRR
- Respect the 6 commandments of the labs
- Respect the specific rules for EEG studies
- Pay the fees for EEG and NIRS studies





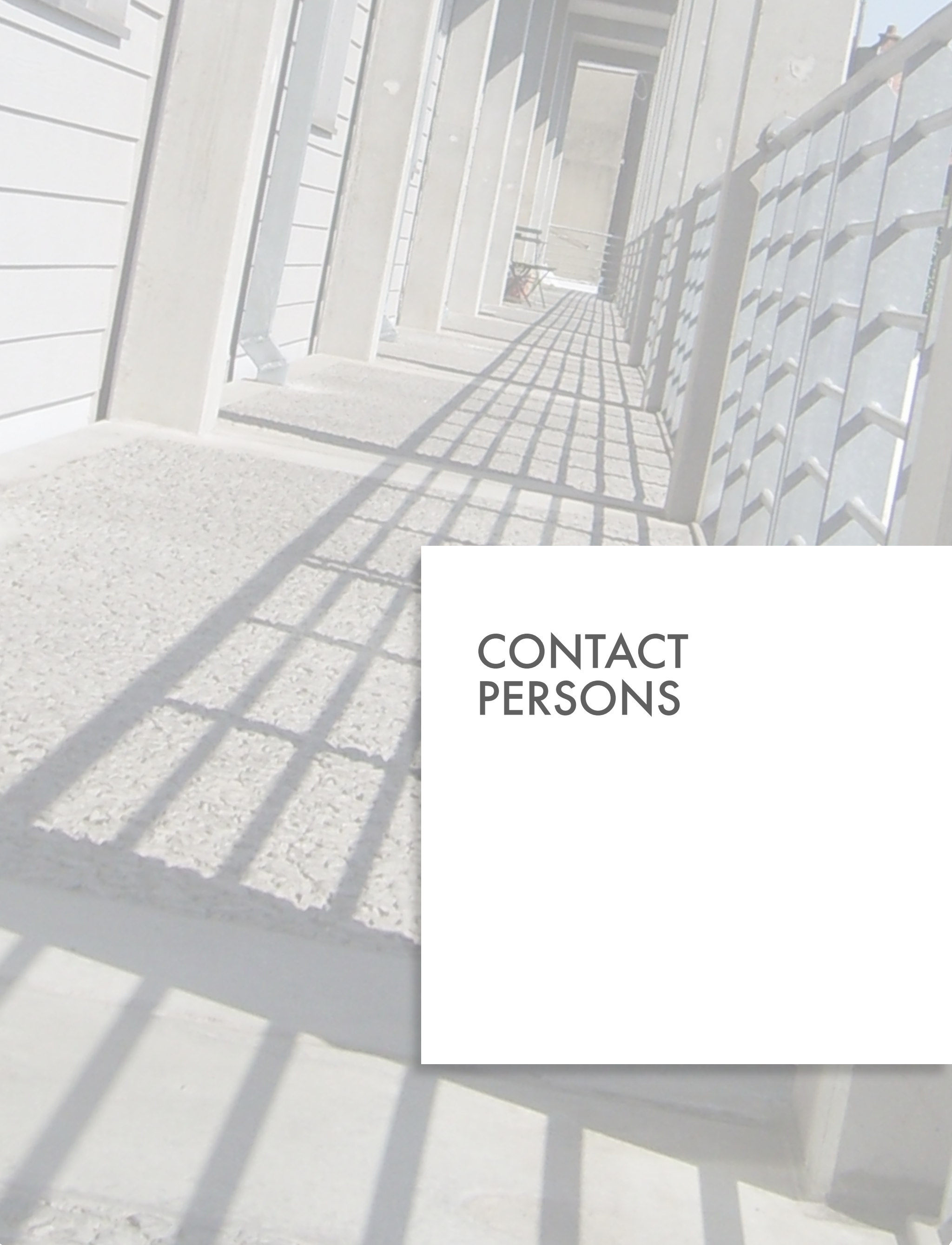
## [HTTP://FSPE.ULB.BE](http://fspe.ulb.be)

- \* Log in the intranet (with your netID and your ULB password)
- \* Everything you need is there (or almost everything)
- \* Dashboard with news feed
- \* Faculty agenda (meetings, deadlines etc)
- \* IT: how to install printers, softwares, eduroam etc
- \* Documents, regulations, ethics forms etc



# OPEN SCIENCE

- \* [Data Management Plan \(DMP\)](#)
- \* [Open Science Framework \(OSF\)](#)
- \* [Data Protection](#)
- \* [Open Access](#)
- \* [Practical guide for transparency](#)



# CONTACT PERSONS

GENERAL QUERIES

ACCESS TO THE LABS

GRR ACCOUNTS



ANGÉLIQUE BERNACKI

RESEARCH FUNDING

SCIENTIFIC EVENTS

CRCN COMMUNICATION

SONA, BOOKLET UPDATE



VINCIANE GAILLARD

SLEEP LAB & NIRS LAB

ETHICS COMMITTEE



PHILIPPE PEIGNEUX

HARDWARE & SOFTWARE  
PROBLEMS IN THE LABS



FREDERIC RESIER

## EEG BIOSEMI LAB



PHILIPPE PEIGNEUX



AMANDINE VAN RINSVELD

## CONTROL OF ALL LABS



PHILIPPE PEIGNEUX



CATHERINE CULOT

## ULBABY LAB



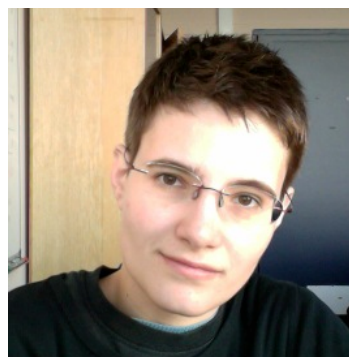
JULIE BERTELS



ARNAUD DESTREBECQZ

## NEW EYE-TRACKING LAB

## EEG BRAIN AMP LAB



FABIENNE CHETAÏL

## PERCEPTION LAB



MATHIEU GUILLAUME



**CHARTERS**

# CHARTER FOR RESEARCHERS

## Foreword

### In order to use all the CRCN resources, you need to:

- Read the charter (one version for researchers and one version for students)
- Sign it and send it back to Angélique (paper file or scan)
- Respect the rules
- For infringements of the CRCN rules, your access to the CRCN resources might be denied by the academic authorities.

When I conduct a study at the CRCN, I commit myself to:

## 1. General aspects

- a. When I detect a problem in a lab, in the interns room or with a small equipment, I immediately inform Catherine Culot.
- b. I do not use USB sticks in the labs. I do use NESTOR instead
- c. I am responsible for the students under my supervision (research seminars, research internships, theses). They are not allowed to use GRR. They will only access the SONA system through my personal account, under my responsibility and I remain accountable for what they will do
- d. If I consider installing a program on any of the computers in the labs or in the interns room, I ask Catherine Culot first. I never install any program without her consent

## 2. Badges & keys

- a. I ask Angélique Bernacki to validate my ULB badge so that I can access the CRCN labs. I also ask her to grant the students under my supervision temporary access to the labs
- b. I do not give the students under my supervision the key to enter the labs for more than a day (except if they run a study during the WE)

## 3. Booking a lab

- a. I book the lab only for the timeslots I will actually use the lab (i.e., not for a whole week if I am planning to run a study only on Monday and on Thursday)
- b. If I however need to book the lab for a whole week, because I will test every single day and I have some equipment that needs to stay on site, I inform other researchers of any left open timeslots (e.g., lunch time, night...). I can comment on my own lab booking and inform other researchers that they can contact me in case they would want to run a study during an open timeslot
- c. I understand that the priority is given in the specific labs for specific corresponding studies (i.e., EEG and EMG studies in the EEG labs, Eye-tracking studies in the New Eye-tracking lab, NIRS in the NIRS lab, Perception studies in the Perception Lab, sleep studies in the Sleep Lab and developmental studies in the ULBabyLab)
- d. When I leave the lab I have been using, I make sure that it is exactly as I found it when I came. I do not leave any mug, glass, book, or personal item in the room

#### **4. Booking small equipment**

- a. I book any piece of small equipment via GRR, even if I won't use it for long
- b. I only book the items that I need to run the study
- c. I do not book small equipment for long periods while not being certain I will use it (no abusive booking practices)
- d. I use the small equipment with caution and put it back in the correct cabinet, with all its accessories (keys in Angélique Bernacki's office)

#### **5. SONA**

- a. I respect all SONA rules
- b. I do not use SONA for paid studies
- c. I do not use SONA for studies outside the Solbosch Campus

**I hereby declare that I have read the CRCN Charter for researchers and that I will respect all the rules listed.**

**Full Name:**

**Date:**

**Signature (preceded by the words «Read and approved»):**



# CHARTER FOR STUDENTS

## Foreword

### In order to use all the CRCN resources, you need to:

- Read the charter (one version for researchers and one version for students)
- Sign it and send it back to Angélique (paper file or scan)
- Respect the rules
- For infringements of the CRCN rules, your access to the CRCN resources might be denied by the academic authorities.

When I conduct a study at the CRCN, I commit myself to:

## 1. General aspects

- a. I ask my supervisor to book any lab or small equipment, as I am not allowed to do it myself.
- b. When I detect a problem in a lab, in the interns room or with a small equipment, I immediately inform my supervisor
- c. I do not use USB sticks in the labs. I do use NESTOR instead
- d. If I need a specific program on any of the computers in the labs or in the interns room, I ask my supervisor. I do not install any program without his consent

## 2. Badges & keys

- a. I am the sole user of the temporary badge that I have received to access the CRCN labs.

- b. I ask my supervisor the key to enter the labs or the interns room. In case he/she is absent, I refer to Virginie Borguet, provided that my supervisor gave his/her consent
- c. I NEVER keep a key with me. If Virginie Borguet is not there, I leave the key in the mailbox next to her door. Under exceptional circumstances (e.g., testing during the WE), I can keep the key, provided that my supervisor agreed on that.

## 3. Using the labs

- a. I ask my supervisor to book a lab, as I am not allowed to do it myself
- b. I communicate precise periods of time when I am available to run the study, in order to avoid abusive booking practices
- c. When I leave the lab I have been using, I make sure that it is exactly as I found it when I came. I do not leave any mug, glass, book, or personal item in the room

## 4. Using small equipment

- a. I ask my supervisor to book small equipment, as I am not allowed to do it myself
- b. I only book (via my supervisor) the items that I need to run the study
- c. I avoid booking (via my supervisor) small equipment for long periods while not being certain I will use it (no abusive booking practices)
- d. I use the small equipment with caution and put it back in the correct cabinet, with all its accessories (keys in Angélique Bernacki's office)

## **5. SONA**

- a. I ask my supervisor to create a SONA study, as I am not allowed to do it myself
- b. I have read the SONA guidelines and will respect all SONA rules

**I hereby declare that I have read the CRCN Charter for students and that I will respect all the rules listed.**

**Full Name:**

**Supervised by:**

**Date:**

**Signature (preceded by the words «Read and approved»):**