

EVALUATION REPORT OF THE UNIT  
LINC - Laboratoire de recherches intégratives en  
neurosciences et psychologie cognitive

UNDER THE SUPERVISION OF THE  
FOLLOWING ESTABLISHMENTS AND  
ORGANISMS:

Université de Franche-Comté - UFC

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**EVALUATION CAMPAIGN 2022-2023**  
GROUP C

Rapport publié le 15/06/2023



In the name of the expert committee<sup>1</sup> :

Bérengère Guillery-Girard, Chairwoman of the committee

For the Hcéres<sup>2</sup> :

Thierry Coulhon, President

Under the decree n° 2021-1536 of 29th November 2021:

<sup>1</sup> The evaluation reports "are signed by the chairperson of the expert committee". (Article 11, paragraph 2);

<sup>2</sup> The president of the Hcéres "countersigns the evaluation reports established by the expert committee and signed by their chairperson." (Article 8, paragraph 5).

This report is the result of the unit's evaluation by the expert committee, the composition of which is specified below. The appreciations it contains are the expression of the independent and collegial deliberation of this committee. The numbers in this report are the certified exact data extracted from the deposited files by the supervising body on behalf of the unit.

## MEMBERS OF THE EXPERT COMMITTEE

**Chairperson:** Ms Bérengère Guillery-Girard, Ecole Pratique des Hautes Etudes, Caen

**Experts:**

Ms Florence Cayetanot, Sorbonne university, Paris (representative of CNU)

Mr Etienne Coutureau, Centre national de la recherche scientifique - CNRS, Bordeaux

Ms Véronique Deroche-Gamonet, Institut national de la santé et de la recherche médicale - Inserm, Bordeaux

Ms Suzanne Lesage, Inserm, Paris (PAR representative)

## HCÉRES REPRESENTATIVE

Mr Giovanni Stevanin, Inserm, Paris

## CHARACTERISATION OF THE UNIT

Name:

- Laboratoire de Recherches Intégratives en Neurosciences et Psychologie Cognitive
- Acronym: LINC
- Label and number: UR481
- Composition of the executive team: Emmanuel Haffen and Vincent Van Waes (assistant director)

## SCIENTIFIC PANELS OF THE UNIT

SVE Sciences du vivant et environnement

SVE5 Neurosciences et troubles du système nerveux

CNU69 Neurosciences

## THEMES OF THE UNIT

The thematic axis of the 'Laboratoire de Recherches Intégratives en Neurosciences et Psychologie Cognitive' (LINC) focuses on decision-making in various psychiatric and neurological populations: mood disorders, neurodegenerative diseases, behavioural and attachment disorders. The LINC unit conducts translational and reverse translational research on decision-making, divided into eight main themes: mood, attention, perception, emotions, learning, reward, impulsivity and movement, all from a clinical, ethical and psychological perspective.

Research aims of the unit are to:

- 1) characterise these disorders and their physiological mechanisms,
- 2) define specific markers (psychophysiological, electrophysiological, neuroimaging),
- 3) and develop therapeutic tools (neuromodulation techniques, drugs, psychotherapies).

## HISTORIC AND GEOGRAPHICAL LOCATION OF THE UNIT

The LINC research unit exists since 1996 as UR481. It was originally composed of university professors and lecturers in the domains of biology and physiology, interested in neuroscience research focused on olfactory perception in animals and humans. The unit was affiliated to the field of medical and health research at the University of Franche-Comté and included hospital-university professors. Since 2008, the research team fruitfully integrated researchers and research professors from two local university faculties: Faculty of Sciences and Techniques and Faculty of Medical and Pharmaceutical Sciences. In 2016, university professors and lecturers in basic neuroscience and biochemistry joined the unit, and other academics specialised in cognitive psychology from the university faculty of Language, Human and Social Sciences arrived in 2020.

The LINC is affiliated to the Franche-Comté University (UFC), founding member of the communauté d'universités et d'établissements (COMUE), Université Bourgogne Franche-Comté (UBFC), with three locations: the 'Bouloie' site (Faculty of Science and Techniques), the 'Hauts du Chazal' site (Faculty of Medical and Pharmaceutical Sciences) and the City centre (Faculty of Language, Human and Social Sciences).

## RESEARCH ENVIRONMENT OF THE UNIT

The LINC unit (UR 481) is well integrated in its academic, hospital and educational ecosystem. In particular, the unit is a member of several different structures, such as the Maison des Sciences de l'Homme et de l'Environnement (MHSE) of the University of Franche-Comté (UFC), hosting administrative and technological platforms and premises; the regional Sociétés d'Accélération du Transfert de Technologies (SATT), created by the Programme des Investissements d'Avenir (PIA) and the association « Observatoire Régional de la Santé » (ORS) of the BFC COMUE. The LINC is also deeply committed to the ISITE PIA 3 BFC project co-led by a PI of the unit. Members of the unit have indeed several leading roles in these local projects and structures: at the MSHE, two members of the unit coordinate the experimental platform for behaviour and cognitive sciences. One member is president of the ORS.

In addition, the unit is also involved in structures and projects with national scope. For example, one of the team's members is the director of research of the FundaMental Foundation since 2018 and another coordinates the national platform for end-of-life research at the MSHE.

Interestingly, the unit hosts or shares several technical platforms and services:

- 1) a preclinical research facility,
- 2) a clinical research platform,
- 3) a drug candidate development platform,
- 4) a small rodent facility with behavioural platform,
- 5) and a university hospital facility (neuroimaging and neurostimulation).

The unit also has access to patient cohorts through different networks (Reference network in psychiatry of the Fondation FondaMental and Reference centres in Neurology (NSPark, CM2R)).

In terms of educational actions, the unit contributes to the thematic pole Health, Cognition, Sport and to the Collegium Health Sport of the UBFC in which the unit's director is a member of both steering committees since

2017 and 2018, respectively. The master Biology-Health program Physiology, Neurosciences and Behaviour of the UBFC is attached to the LINC and this allows the hosting of foreign lecturers in the unit to participate in the training of this master. The unit is also a member of the Federation of Educational Research (FR-educ) with the creation of a Mixed Chair of Research Excellence in Teaching Sciences since 2021 (PIA4 project, a Junior Professor position, and a postdoctoral fellow, both under recruitment).

In terms of Health, the unit is strongly implicated in the continuum Care-Research supported by the UBFC and the hospital (CHU Besançon) that allows a link between fundamental and clinical research in neurosciences and cognitive psychology applied to mood disorders and neurodegenerative diseases. In particular, there is an interface between the unit and the care services thanks to the mental health axis of the Clinical Investigation Center (CIC-1431, Inserm), at the CHU of Besançon, carried out by the unit's director who was also the coordinator of the CIC from 2015 to 2020. Through the CIC, the unit interacts with the FEMTO-ST CNRS/UBFC institute to develop research projects focused on technological innovations. Finally, the unit takes part in the new FCRIN (French Clinical Research Infrastructure Network)-labelled F-psy-NET (French Psychosis Network) that includes 36 centres through France, dedicated to the implementation of clinical trials in the psychiatric disorders for which the unit's director is the leader of the task force 4 (research methodology and clinical trials in psychiatry). The unit's director is also leader of the workpackage 'Validation of stratification biomarkers in real-world datasets and clinical trials' in the PEPR PROPSY (Plan d'Investissements d'Avenir PIA4 grant).

### UNIT WORKFORCE: in physical persons at 31/12/2021

<b>Permanent personnel in active employment</b>	
Professors and associate professors	17
Lecturer and associate lecturer	17
Senior scientist (Directeur de recherche, DR) and associate	0
Scientist (Chargé de recherche, CR) and associate	1
Other scientists (Chercheurs des EPIC et autres organismes, fondations ou entreprises privées)	3
Research supporting personnel (PAR)	7
<b>Subtotal permanent personnel in active employment</b>	<b>45</b>
Non-permanent teacher researchers, researchers and associates	3
Non-permanent research supporting personnel (PAR)	7
Post-docs	3
PhD Students	18
<b>Subtotal non-permanent personnel</b>	<b>31</b>
<b>Total</b>	<b>76</b>

DISTRIBUTION OF THE UNIT'S PERMANENTS BY EMPLOYER: NON-TUTORSHIP EMPLOYERS ARE GROUPED UNDER THE HEADING 'OTHERS'.

Employer	EC	C	PAR
<b>Université Franche-Comté</b>	34	0	5
Inserm	0	1	0
Employeur étranger	1	1	0
CHRU Besançon	1	0	1
Others	1	0	1
<b>Total</b>	<b>36</b>	<b>2</b>	<b>7</b>

## UNIT BUDGET

Recurrent budget excluding wage bill allocated by parent institutions (total over 6 years)	444,053
Own resources obtained from regional calls for projects (total over 6 years of sums obtained from AAP idex, i-site, CPER, territorial authorities, etc.)	3,205,500
Own resources obtained from national calls for projects (total over 6 years of sums obtained on AAP ONR, PIA, ANR, FRM, INCa, etc.)	5,367,145
Own resources obtained from international call for projects (total over 6 years of sums obtained)	1,478,180
Own resources issued from the valorisation, transfer and industrial collaboration (total over 6 years of sums obtained through contracts, patents, service activities, services, etc.).	297,200
<b>Total in euros</b>	<b>10,792,078</b>

## GLOBAL ASSESSMENT

Research activities of the LINC unit mainly focuses on decision-making, but also on treatment options in neurological (Alzheimer, multiple sclerosis) and psychiatric conditions (depression, schizophrenia). The unit has evolved considerably and in a positive way during the last contract period. In particular, thanks to **excellent national attractiveness**, it now hosts research professors in cognitive psychology and neuropsychology who recently integrated the unit. The unit also has a remarkable local and national presence with privileged access to **exceptional technological** platforms and large patient cohorts. It thus has all the resources needed to conduct high-quality multidisciplinary research in the field of neurological and mental health pathologies with innovative diagnostic and therapeutic strategies. **This has strongly increased its capacity to raise funding (26 grants of more than 100keuros obtained including competitive ones at the national and European levels) which is an excellent result, and has increased its scientific production by 130% compared to the 2010–2015 term which can also be considered as an excellent evolution**, although the main topic of decision-making remains underrepresented. **Its interaction with society was rated outstanding** because of the relation of the unit with patients in clinical practice, its investment in teaching, its links with multiple private companies and start-ups and its engagement with lay public through interviews and press release but also original studies involving artists and musicians. International involvement in research could be strengthened, however, notably regarding staff (one postdoc from abroad), PhD recruitment (3 from abroad) and grant applications (2 at the European or international level). This large-size unit is composed of 76 members as of 31/12/2021, including 34 tenure university or hospital staff, university professors and lecturers and a single researcher (Inserm) spread over three geographical sites, and this increases the risk of dispersion in its functioning as well as in its topics that would benefit from a better internal structuration.

## DETAILED EVALUATION OF THE UNIT

### A – CONSIDERATION OF THE RECOMMENDATIONS IN THE PREVIOUS REPORT

- The previous committee pointed out the weakness of the description of the functional organisation of the unit, 'who does what', how the team members of staff are distributed over the projects and what their missions are. This point could also have been improved in the current report.
- Thematic heterogeneity was also mentioned, with publications focused on specific members rather than on the two thematic axes described at the time. An improvement in thematic coherence has been achieved since then, with a refocusing on a single axis, decision-making. This is evident in the document, but it could still be improved, and a better functional structuring would facilitate the external visibility of the scientific approaches of the unit.
- The previous committee encouraged the unit to strengthen its attractiveness for postdocs and full-time researchers. These latter two points could still improve since only three postdocs were recruited and no full-time researcher. We can, however, note that the unit integrated lecturers and professors through local mobility. Finally, during this contract period, the amount of funding obtained by the unit has increased considerably (+258%), which will undoubtedly facilitate the hosting of students and postdocs.

### B – EVALUATION AREAS

#### EVALUATION AREA 1: PROFILE, RESOURCES AND ORGANISATION OF THE UNIT

##### Assessment on the unit's resources

**The LINC unit has excellent human and financial resources to conduct its own research.** As of 31/12/2021, the unit assembles 45 permanent staff members, including 38 tenure researchers, professors and university hospital researchers and lecturers and seven permanent administrative and technical staff. Compared to the previous term, the unit has reinforced the pool of its tenure researchers by hosting sixteen additional professor researchers and university hospital researchers. Half of them holds an HDR, showing the capacity of the unit to train a large number of PhD students. A total of 38 PhD students were present over the evaluated period 2016–2021 with twenty theses defended. Only three postdoctoral fellows were hired, though, which does not fully compensate for the lack of permanent researchers in this unit (only 2).

The unit has shown an impressive increase of +258% in funding obtained, compared to the term 2010–2015, particularly in competitive European (ERC starting grant, H2020 program) and national (ANR, PHRC, PIA, grants from French associations and foundations...) calls. In addition, the unit has just obtained funding for a joint Chair of excellence in teaching sciences and cognitive psychology. Moreover, the unit's project is scientifically and financially supported at the local (UFC, CHU Besançon) and regional (UBFC, regional council of FBC) level. This shows the full financial operating autonomy of the unit with a total amount of €10,347,965 for the evaluated period. Finally, the unit also benefits from a remarkable fundamental and clinical network of national and international collaborations (e.g. FCRIN F-PsyNET, PEPR PROPSY, FondaMental foundation, NS Park, CM2R, FEMTO-ST institute), as well as national and European industries (Dixi-Medical, Besançon, Gynov, Bordeaux, ALCYM Engineering, Besançon, Bioserenity, Paris, Neuroelectrics STARSTIM, Barcelona, UCB Biopharma, Brussel...).

### Assessment on the scientific objectives of the unit

The research topic of the LINC unit focuses on a common project around a single research theme which is 'Decision-Making.' The project's aim at dissecting pathophysiological mechanisms of decision-making and its main neuromodulation components, and at developing new diagnostic and therapeutic methods in psychiatric and neurological diseases, specifically in mood disorders, in conduct and attachment disorders, cerebrovascular diseases, and neurodegenerative disorders (Parkinson's disease, Alzheimer's disease, multiple sclerosis). **The scientific objectives to translate computational and animal models to the clinical practice are ambitious but excellent.** Decision-making is considered here in a very broad way, and makes it possible to address fundamental, clinical and therapeutic questions by using different and complementary techniques. The unit's objective is to use the translational approach to develop innovative therapeutic proposals, which is a major public health issue. However, the unit lacks a structuration into well-defined lines of research and there are still numerous projects that are not associated with the decision-making topic (>50% of the scientific production). The research carried out in each of the fields mainly by individual team members is of high quality, but there are relatively few collaborations between the members of the unit that would allow this objective of conducting a translational approach to be fully achieved. The expertise of the unit staff, the strong support from the Bourgogne Franche-Comté region and the excellent work environment where the unit has access to research platforms and cohorts of healthy/patient subjects are major assets for achieving these objectives.

### Assessment on the functioning of the unit

The unit has an **outstanding functioning** regarding the respect of all categories of personal and their working conditions. In accordance with principles enacted by the principal tutorship, the UBFC, which obtained the 'HR Excellence in Research' (HRS4R) label in 2016, the principal investigators of the LINC unit have a clear and open policy to value the skills, training, career development or internal mobility of people with respect to gender equity and without any ethnicity discrimination or any violence, to guarantee good working conditions to all team members and to respect the equilibrium between private and professional life. Since 2015, the UFC has carried out the Inter-regional Laboratory for Equality Project (PILE), in collaboration with the University of Geneva, whose objective is to guarantee access to quality employment for women, sustainable professional integration and access to positions of responsibility. The unit is aware of the working conditions, health and security of its staff, and is active in the prevention of psychosocial risks, since the director and a team's member are implicated in different actions towards Health such as their involvement in the management of the UFR Santé or their role as head of the Health Student Assistance and Orientation Unit (CAOE). A welcome booklet of the unit and the rules of procedures regularly updated by the health and safety correspondent are made available to all the staff members when they are hired. The unit applies the recommendations of environmental risk prevention and the pursuit of the sustainable development goals by setting up an Eco-responsibility steering committee. Laboratory council with elected officials and monthly meetings are set up to discuss about the future or ongoing projects, budget allocations and to improve internal day life. During the last COVID crisis, the team was capable of implementing anti-Covid sanitary measures, such as home office and activity continuity plans, by promoting teleworking, videoconferences for meetings and teaching to Master 2 students and a minimum activity to the animal facilities. Finally, the LINC complies with the national and European rules by creating the Data Management Plan (DMP) in association with the CIC of the CHU of Besançon.

*1/ The unit has resources that are suited to its activity profile and research environment.*

Strengths and possibilities linked to the context

**One of the strengths of the LINC unit is its outstanding local environment (hospital and university)**, suitable to translational research from animal models to healthy control subjects and patients with neuropsychiatric and neurodegenerative diseases. The unit is a multidisciplinary team of clinicians, researchers, professors and associate professors and lecturers in basic and human sciences. Other strengths of the unit are the access to research platforms that cover all the methodologies requested to achieve its scientific program, such as genomics and histopathology, functional neuroimaging and neuromodulation, sensory and movement analysis, animal facilities, access to cohorts of healthy and affected subjects and the 'Mésocentre de calcul de Franche-Comté' for big data analysis. One of the strongest opportunities of the LINC unit is that several PIs are members



of the steering committee or take part in numerous **remarkable clinical networks** and national and international organisations (FCRIN F-PsyNET, FondaMental foundation, NS Park, FEMTO-ST institute...). Moreover, the unit has demonstrated an impressive capacity to raise funding (total 10,347,965 euros during the evaluated period) from foundations or patient associations (FRM, FMR, Fondamental, Sisle, Bettencourt-Schueller...) but also regional (BFC university), national (ANR, PHRC, PIA) and European (ERC, H2020) agencies, as well as through five research contracts with industries. Indeed, they have collaborations with several private companies (Dixi-Medical, Gynov, ALCYM Engineering, Bioserenity, Neuroelectrics STARSTIM, UCB Biopharma...).

#### Weaknesses and risks linked to the context

A major weakness in terms of the human resources is the low number of full-time researchers (n=2, one from Inserm and one paid on foreign funds) versus part-time PI such as professors/associate professors/lecturers (n=34). Moreover, this has **not been compensated by postdoctoral positions** (n=3) during the evaluated term.

*2/ The unit has set itself scientific objectives, including the forward-looking aspect of its policy.*

#### Strengths and possibilities linked to the context

The LINC unit covers most neuroscience research in the Bourgogne-Franche-Comté region. Its objectives are to contribute to diagnosis in the field of neurology and psychiatry and to develop new therapeutic strategies. The multidisciplinary character of this unit, its local and national implantation as well as the access to appropriate research platforms and cohorts allow them to fully satisfy these objectives. From this point of view, the unit has an exceptional configuration to address major societal challenges. Moreover, the unit has been able to modify and focus progressively its main research topic towards decision-making, through successful welcoming of sixteen local AMU neuropsychologists in recent years and their scientific integration in the unit projects, which indicates **a very good to excellent adaptability of the scientific strategy**.

#### Weaknesses and risks linked to the context

Despite the efforts made by the team's director to focus the objectives on a common narrowed research theme which is 'decision-making', the committee finds a somewhat underlying scattering of some subprojects as shown by publications on COVID-19, end-of-life (aged people and prisoners), HPLC-related technical developments and sixteen papers on the synthesis of mono-/multi-target therapeutic molecules for Alzheimer's disease. In addition, there is a lack of continuity in certain projects which would be better integrated into the overall approach of the unit, such as that of the chemical development of therapeutic compounds.

Overall, the committee feels the **difficulty of assessing the relevant scientific output of the LINC team is because a large part of the publication list (n=~120/178 or >50% of their scientific production) does not fit to the main objective of the unit** but rather reflects the scientific production of individual team members in their own specific field of expertise. The committee is however aware that a structuration around decision-making as a common theme is in progress, in particular with the very recent integration (2021) of several associate professors in psychology.

*3/ The functioning of the unit complies with the regulations on human resources management, safety, the environment, and the protection of scientific assets.*

#### Strengths and possibilities linked to the context

The LINC unit complies with the regulations on human resource management, by committing to the HR Excellence in Research strategy obtained by the UFB to guarantee good working conditions to all team members and through the Inter-regional Laboratory for Equality Project (PILE). In terms of scientific projects, budget allocations, training, lab organisation, the unit has striven to set up monthly meetings and the laboratory council. All the members, including researchers, students and technical staff are invited to assist and to present their data. The unit regularly hosts foreign students (n=3 during the contract) or postdocs (n=1) and offers them the opportunity of French classes at the UFC Center for Applied Linguistic (CLA). Regarding diversity, it is notable that the unit hosts physiotherapists and nurses as PhD students. The unit is aware of the staff training, career development or internal mobility, which has contributed to the tenure of one research engineer. All PhD students benefit from the training of the doctoral school and from the unit for the live animal model experimentations.

The committee appreciates that most of the recurring budget is to support as a priority for the students' missions and training.

In an open science approach, the unit has set up a Data Management Plan (DMP). Through the interaction with the CIC at the CHU of Besançon, the team ensures the protection of computer and clinical research data. In terms of health and safety, the unit regularly updates the business continuity plans to deal with any emergency situations, particularly during the last COVID19 crisis. The unit implements all recommendations related to the prevention of environmental risks and its pursuit of the sustainable development goals, by setting up a research and innovation program such as Strategic Management Dialogue (DSG) ECOLAB and an Eco-responsibility steering committee. As a whole, during the separate meetings the committee members had with researchers, technical and administrative staff and students, **the committee noticed an excellent working atmosphere** between all staff members, and everybody seemed happy to work together in the unit.

## Weaknesses and risks linked to the context

Despite an attractive working space of 1200 m<sup>2</sup>, **the lab premises are spread over three sites (UFR Santé, CHU of Besançon and UFR SLHS) which may limit a strong interaction and cohesion of the team.**

## EVALUATION AREA 2: ATTRACTIVENESS

### Assessment on the attractiveness of the unit

The LINC unit constitutes a recognised pole of neurocognitive and psychology research within the national and European academic communities. **The local environment is exceptional in terms of equipment and facilities and its capacity to raise funds is excellent at the national and European levels (ANR, H2020, ERC).** Members of the LINC unit are regularly invited to present their work and to participate in conferences (n=100) and are members of editorial and international scientific societies. Hence, **the unit is very attractive at the national level** and integrated seven local actors in neuropsychology and one researcher during the last contract period and strongly increased its capacity to recruit PhD students (24 vs 38 for the last 5 years). New members of the unit benefit from Bourgogne Franche-Comté funding to initiate and develop their research activity. However, the recruitment of postdocs and of undergraduate and graduate students from abroad remains low (n=4) and the unit may have suffered from insufficient visibility of its themes.

*1/ The unit has an attractive scientific reputation and contributes to the construction of the European research area.*

## Strengths and possibilities linked to the context

Members of the LINC unit were regularly invited to present their work at both national (n=53) and international (n=47) levels, despite the COVID19 pandemic which led to the cancellation of many conferences. They participated to the major national conferences in their field of expertise such as Congrès Français de Psychiatrie, journées de la société de neuroendocrinologie, journées de la société de neuropsychologie, congrès de la société de neuroradiologie. They have also presented their work in international meetings such as European conferences in psychiatry, world federation of international therapeutic neuroradiology, conferences on brain stimulation in psychiatry, conference of the European society for cognitive psychology. Seven members of the unit were involved in the organisation of an international congress and several symposia in international meetings (n=14) such as the European stroke committee or European congress of brain stimulation committee. One member of the unit was also involved in the organisation of a master class during the evaluation period. Members of the team are involved in 27 editorial boards of national and international scientific journals and were involved in four directories of collections or special issues.

One of the team researcher has a recognised national position in foundations and research consortia in psychiatric health such as the Fondation FondaMental or FCRIN – psyNET that are involved in the development and support of psychiatric research. Four members of the team are involved in European boards in different societies, foundations, or research networks such as European Society of Minimally Invasive Neurological Therapy, European Association of Palliative Care, and International Network of tES/TMS Trials for Addiction Medicine.

Different members of the team exercised responsibilities in a national medical society (9) or are members of international scientific societies (5). One professor has been elected a junior member of the 'Institut de France' until 2021, which demonstrates a recognition by the National scientific community of the quality of the

work produced. The international visibility of the unit is also shown by the granting of an ERC starting support in 2021 by an associate professor of the unit. In 2019, a research engineer of the team received a prize from the Marina Picasso foundation for the development of an apparatus (neuro-artistic) to manage emotions for teenagers or adult people. A professor received a presentation price from IREB in research against drinking in 2019.

## Weaknesses and risks linked to the context

The committee did not identify major weaknesses in this field since the unit is visible in multiple ways, but the committee noted that >50% participation to meetings/congresses were in France. The visibility of the unit may have suffered from the lack of structuring of the unit into clear different research lines.

### *2/ The unit is attractive for the quality of its staff hosting policy.*

## Strengths and possibilities linked to the context

A total of 38 PhD students were enrolled in the laboratory during the last contract period, which represents a ratio of 1.9 PhD students per HDR holder. The number of PhD students has significantly increased during the contract period (from 24 in the previous period to 38), and the defence of ten HDRs in the unit, which has increased the ability to recruit and attract students. Among these 38 PhD students, twenty have defended their thesis, among which, three are still working in this unit. All students have published articles related to their PhD. The average duration of the theses was 4.1 years, which is slightly longer than expected, but the COVID period may have contributed to their lengthening. PhD students are invited to participate and present their work during the lab meetings (one per month). Most graduated students pursued with a postdoctoral period or obtained a permanent position in the private or public sector, which constitutes a good post-thesis dynamic.

A positive point is that the major part of the unit's recurrent budget is reserved for students to enable them to conduct their research, participate to scientific meetings and travel to foreign laboratories.

The LINC unit is attractive: a position of professor allowed the recruitment of a researcher from Paris Descartes university, and in 2021, seven professors/lecturers in cognitive psychology joined the unit. Moreover, the laboratory has obtained a junior professor position (open since September 2022) on a chair of excellence. It should also be emphasised that the last three lecturers or professors recruited have obtained funding ranging from 20 to 100 k euros from the region for their installation and the development of their research project. The unit has important national and international connections: eight international researchers and eleven national researchers have been invited for a conference in the research unit and collaborate with the LINC unit.

The team leader oversees the scientific ethics commission project within the unit's UFR, which is responsible for applying the guidelines of the Conference of Health UFR Directors.

A member of the laboratory is in charge of raising awareness of PhD students to open science charter developed by UFC at the end of 2021. UFC has adopted a charter 'for Scientific Integrity' which concerns all the staff. Good laboratory practices and safety rules are indicated in the unit's welcome booklet which must be signed by all and presented to each new member of the unit.

## Weaknesses and risks linked to the context

The unit is aware of some weaknesses, mainly to develop the international visibility with students and researchers from abroad.

The attractiveness of the unit to postdoctoral positions (only 3 reported in the present document) is insufficient for a unit of this size and reputation. The students have different training backgrounds (doctors, psychologists, biologists, paramedics), which is enriching for all, but there seems to be little initiative to exchange ideas during formal (student seminars for example) or informal moments. There is an insufficient number of students or postdocs from abroad (only 3 PhDs from Switzerland, Tunisia and Spain and 1 postdoc from Spain).

### *3/ The unit is attractive because of the recognition gained through its success in competitive calls for projects.*

## Strengths and possibilities linked to the context

**The capacity of the LINC unit to have success in competitive calls is excellent** (78 grants from 1K€ to 1.3M€). The unit responded to European funding calls (n=2), and in particular one of its PI gets an ERC starting grant in 2021 on the project, 'an integrated theory of deciding and acting'. The unit is also a partner in a H2020 project 'R-LINK' on 'Optimising response to lithium treatment through personalised evaluation of individuals with bipolar I disorder' involving fifteen partners from eight European countries. The LINC unit was able to obtain grants from ANR (n=5, 2 as coordinator), participated in 2020 to a MRSEI ANR to support the creation of a European scientific

network and they contributed to submit a H2020 project untitled 'Smart Community Care'. Moreover, LINC has obtained grants from other national organisations such as IRESP or PHRC (ECRIN in 2018). In addition, members of the LINC are partners of different ANR contracts, such as AAPG or ANR JCJC untitled MIMS and focused on motor imaging and high-resolution EEG explorations during limb immobilisation in clinical populations. The unit LINC is also a partner of other national calls such as PNR-EST on the topic 'environmental and occupational health'. The director of the LICN was a member of the piloting committee of the 'I-SITE program of Bourgogne Franche-Comté PIA3' and was a co-PI of a PIA3 project focused on decision-making and its mechanisms and their interactions with the attentional, memory and motor systems. The Unit has obtained a chair of junior professor and a three year-postdoctoral position related to the PIA4.

At the regional level, the LINC unit successfully obtained 27 grants for research projects in the field of decision-making and aging, and fourteen grants from associations or research foundations.

The LINC unit is attractive for students, twenty students have defended their thesis during this contract period and eighteen are currently enrolled in a thesis. PhD grants are provided mainly by the region (n=6) and the doctoral school (n=12), the remaining students financed on grants.

#### Weaknesses and risks linked to the context

The capacity to obtain funding from Europe for Postdocs was insufficient.

#### *4/ The unit is attractive for the quality of its major equipment and technological skills.*

#### Strengths and possibilities linked to the context

**The LINC unit has an exceptional research environment with its own or shared platforms**, some of which are IBISA and ISO 9001 certified and also UFC and UBFC certified:

- 1) preclinical research platform for cellular and tissue analyses, optogenetics, pharmacogenetics, microscopy and imaging, DIMACELL platform for laser microdissection, histopathology;
- 2) clinical research platform for sensory analysis, platform of the MHSE (CNRS USR 3124), clinical trials via the CIC-1431, movement platform;
- 3) drug candidate development platform dedicated to bioanalysis, structural analysis, molecular modelling and screening, library of molecules;
- 4) and small rodent facilities with a behavioural platform and A2 rooms.

The unit also has access to the university hospital platform Neuraxess, for functional neuroimaging and neurostimulation through the Neuropsychiatry axis of the technological innovation module of the CIC-1431 at the CHU Besançon. This facility has been equipped with functional magnetic resonance imaging (fMRI) in particular by obtaining a regional funding in 2020 for a new research-dedicated T3 MRI hosted at the CHU of Besançon. Other equipment includes high resolution-EEG (HR-EEG), near-infrared spectroscopy (NIRS), robotic repetitive transcranial magnetic stimulation (rTMS), dynamic susceptibility contrast (DCS), vague nerve stimulation (VNS). These platforms also allow the production of services for other research teams or industry (for example, the Neuroaxess platform for cosmetology). This economic model is relevant and makes it possible to finance part of the running costs of these platforms, which currently amounts to 297 k€, but which the unit's ambition is to increase incomes.

Part of the recurrent funding is also devoted to the purchase of computer hardware and software to maintain a competitive and adapted computer environment (access to the Franche-Comté computing mesocentre, for example). New users as PhD students are trained, supervised, and accompanied by the technical staff of the platforms to work properly on the equipment available. The supervision and management of the platforms are appropriate and allow researchers to work in excellent conditions.

#### Weaknesses and risks linked to the context

The experts of the committee did not identify any weaknesses on this topic and then encourage the unit to pursue its efforts in maintaining high quality equipment in their platforms and training of technical staff in charge of managing the equipment and supporting the users of the platforms.

## EVALUATION AREA 3: SCIENTIFIC PRODUCTION

### Assessment on the scientific production of the unit

As a whole, the scientific production of the LINC unit surpasses 650 publications, which is impressive given that most of the investigators have teaching and/or clinical activities on top of their research projects. Of them, 147 papers of original data were published with leading positions by members of the unit **which was overall very good to excellent**. Among these articles, students were in the first position in 65 papers. A substantial part of the studies with members of the unit as first and/or last author was published in highly recognised journals (e.g. PNAS, J. Comp. Neurol., Brain Structure and Function, J. Experimental Psychology: General). In addition, the expertise of the Unit members allows them to contribute to a significant number of publications (409) as collaborators. Team members also contributed to 70 reviews/comments/opinions/recommendations publications as leaders or in collaboration. The scientific production was shared between different topics but the central theme of the unit, decision-making, accounted for a limited number of publications (16) although excellent in nature.

*1 / The scientific production of the unit meets quality criteria.*

### Strengths and possibilities linked to the context

Research on decision-making, that is the main topic of research of the unit, gathers research on animal models (rodents) and humans. The research goals are investigating the mechanisms of decision-making combining computational and experimental approaches. More specifically, three main subprojects are developed:

- i) understanding anatomical basis of reward-related behaviour,
- ii) understanding the neurobehavioural underpinnings of decision-making under uncertainty,
- iii) testing an integrative theory of decision-making through mathematical modelling integrating behavioural responses and physiological measures through EMG/eye tracking and EEG.

The first two axes are run in both humans and animals, while the third one is run in human subjects only. Overall, the production is excellent with sixteen publications in wide readership (e.g. Barbier et al. PNAS, 2020) and specialised journals (e.g. Santin et al., Mov Disord 2021, Teti Mayer et al., Brain Sciences; Cabeza et al., European Neuropsychopharmacology, 2021, Giustiniani et al., Frontiers in Neuroscience, 2020), which is an excellent achievement given the modest level of funding on this topic. The researchers involved in decision-making have a very good network of national and international collaborators, with a set of established research collaborations at the national (LNC, Marseille) and international (UK, Switzerland) levels. Notably, the granting of an ERC starting fellowship to an early-career researcher recently recruited should allow an increase in the visibility of the research as already attested by several publications in renowned journals (e.g. Servant et al. Journal of Experimental Psychology: General 2021, Journal of Cognitive Science 2021). In addition, the work performed by researchers on the cognitive bases of attention in dual tasks across the lifespan also represents a strength as attested by a series of excellent publications (e.g. Maquestiaux et al., Journal of Experimental Psychology: General, 2020).

Another strong line of research aims at understanding the mechanisms of action of the non-invasive cerebral transcranial stimulation (tDCS). This line of research is developed in animals to understand the potential of tDCS for the treatment of depression (e.g. Peanlikhit et al., Brain Stimulation, 2017), but also addiction (e.g. Pedron et al., Addiction Biology, 2017). In human subjects, a strong corpus of papers demonstrated the potential of tDCS for the treatment of major depressive disorder as reviewed in Martin et al. (Neuroscience and Biobehavioral Reviews, 2018) and in Borderline Personality Disorder (Teti-Mayer et al., Trials, 2019). Taken together, the research on tDCS in animals and Humans led to a total of 21 publications. The unit is also evaluating the effect of tDCS on cognition in a cohort of patients with Alzheimer's disease (AAP Bourgogne – Franche-Comté: ALSTICO).

The medicinal chemistry group of the unit is also strongly involved in drug discovery using a polypharmacology strategy which has led to a total of fourteen papers in very good to excellent A to A+ ranked journals of the discipline (e.g. Malek et al.; 2019, J. of Medical Chemistry) as well as two patents (Ismaili, 2021).

The unit also makes a strong contribution to research networks in mental health as attested by its strong involvement in the PIA PropSy as work package leader. This research in psychiatry mainly focused on depression with the aim at uncovering risk factors, the basic mechanisms, and biomarkers of this mental disease. This research on cohorts of patients has led to authorship in eighteen publications in well-recognised journals specialised in psychiatry (e.g. Yroni et al., Frontiers in Psychiatry, 2017, Samalin et al., Journal of Affective Disorders, 2020). The unit also offers a good expertise in other psychiatric conditions such as Schizophrenia (e.g. Denis et al., Translational Neuroscience 2017) but also neurologic conditions such as multiple sclerosis (e.g. Hadouiri et al., Sensors, 2021) including historical perspective (e.g. Tatu et al., Frontiers in Neurology and Neuroscience, 2018), or brain vascular diseases (Losif and Biondi, Expert Review of Medical Devices, 2019).

Finally, through a total of twelve publications, the unit has been involved in projects aiming to investigate the impact of music on social emotional communication in healthy but also pathological conditions such as disorders of consciousness (e.g. Gabriel et al., *Neurobiology of Learning and Memory*, 2016; Gabriel et al., *Brain*, 2016).

### Weaknesses and risks linked to the context

As shown above, the topics investigated by the unit have been spread across a wide variety of fields. There is an imbalance between the fields regarding the recognition/visibility of the targeted journals. However, the publication supports are very diversified and allow to cover a large public, scientists, professionals and lay public. A point of vigilance must be kept on the human and social sciences (psychology, sociology) to improve their national and international visibility in terms of publications. For the moment, it appears to the committee that human and animal research is rather dissociated and translational questionings still limited. The outputs linked to decision-making, which is declared to be central, appear at this stage rather limited.

*2/ Scientific production is proportionate to the research potential of the unit and shared out between its personnel.*

### Strengths and possibilities linked to the context

In total the unit has produced > 650 publications, as leading authors (n=147), or in collaboration, representing between two and three publications per year per PI, which is substantial given that almost all researchers are also involved in teaching and/or clinical activities. The rate of original publications is very good with and nearly 1/3 of these original articles being issued from work led by members of the unit. All PhD students and postdocs participated to these publications.

### Weaknesses and risks linked to the context

Collaborative publications between unit members are still limited considering the objectives of thematic cohesion. Publications focused on the main project of the unit (decision-making) is still low compared to other topics. About twenty students defended their PhD, which appears very good given the number of Unit members holding their HDR. However, the committee had difficulties to clearly identify the scientific outputs of each of these PhDs despite multiple exchanges with the unit on that aspect but 65 articles among the 147 main articles of the unit was signed by PhD students as first authors.

*3/ The scientific production of the unit complies with the principles of research integrity, ethics and open science.*

### Strengths and possibilities linked to the context

Regarding the integrity, ethics and data protection, the LINC unit policy is based on the best practices in Human research. The unit follows good policies in terms of scientific integrity through internal seminars and involvement of the director of ethics at the level of his UFR. The unit follows the open-science rules put in place by the UFC.

### Weaknesses and risks linked to the context

A query on HAL using the keyword UR481 mentions 96 available documents only, this may be improved. The unit is engaged into an open science approach but around 50% only of the publications appeared in open science with the good affiliation.

## EVALUATION AREA 4: CONTRIBUTION OF RESEARCH ACTIVITIES TO SOCIETY

### Assessment on the inclusion of the unit's research in society

**The inclusion of the LINC unit's research in society is excellent to outstanding.** The unit has significant interactions with the CHRU and contributes to local and national bodies involved in health-related issues (e.g. Ethical national council, National platform on end of life...). The unit is also involved in university teachings and the links with the industrial world are excellent and on an ascending phase with three patents, five research contracts (total: 297 k€ with Sanofi, UCB Pharma, notably) and a recent collaboration with one of the Bioserenity private health centres financed by the *Plan de Relance*. Finally, through their expertise and a regional academic collaboration, they have contributed to the development of the start-up 'EktaH' dedicated to fight against obesity in collaboration with the NuTox team from the UMR Inserm/UB/AgroSup 1231. No Cifre funding was obtained, however.

The team is strongly committed in knowledge diffusion to the lay public, with diverse and original science outreach activities such as a participative science project using mobile EEG for the study of music-evoked emotions and collaborations with an artist.

#### *1/ The unit stands out by the quality of its non-academic interactions.*

##### Strengths and possibilities linked to the context

The LINC unit hosts medical doctors and psychologists promoting interactions with the CHRU and facilitating the clinical benefit of the unit's human and animal fundamental research. Also, the director is a member of the national evaluation committee of the 'Programme hospitalier de recherche clinique national' (PHRC-N).

The unit is involved in local and national bodies dealing with health-related societal issues. Notably, different members of the LINC unit are vice-president of the Ethical National Council, member of the Health Committee of the Besançon town, coordinator of the national research platform on end of life (<https://www.pplateforme-recherche-findevie.fr/>), president of the Regional Health Observatory, and/or research director of the FondaMental foundation.

Six clinical guidelines (e.g. 'Training guidelines for endovascular stroke intervention: an international multi-society consensus document', *Neuroradiology* 2016; 'Transcranial Electrical and Magnetic Stimulation (tES and TMS) for Addiction Medicine: A consensus paper on the present state of the science and the road ahead', *Neurosci BioBehav Rev* 2017) and three articles in professional journals (*Soins en gérontologie* 2020, *Quotidien du médecin* 2016, *La santé en action* 2019) have been produced over the reporting period.

The unit is also involved in teaching activities through the university at various levels (Master Biologie Santé, parcours médical).

The institute is strongly supported by numerous charities (Fondation Bettencourt-Schueller, Fondation de France, Fondation FondaMental...) for a total amount of about 2 M€ over the reporting period.

##### Weaknesses and risks linked to the context

While one member of the LINC has developed a relationship with two patient associations (UNAFAM, Argos 2001), contribution to patient associations, at least as described in the available documents, appears limited and unbalanced between the various PI of the unit.

#### *2/ The unit develops products for the socio-economic world.*

##### Strengths and possibilities linked to the context

Over the reporting period, the LINC unit has established relationships and collaborations with several local, national or international companies. They have worked with eight different companies (DIXI-medical, Gynov, Bioserenity, Neuroelectrics STARSTIM, UCB BIOPHARMA, Manaty, Shine Medical, ALCYM Ingénierie) for the development of experimental (electrodes) or medical (diagnostic) devices, and the development of therapies or the identification of biomarkers. They have also contributed to clinical trials in collaboration with pharmaceutical companies in the context of mood disorders. They also collaborated with cosmetic manufacturers for an objective measure of real time evaluation of emotions.

Five research contracts, with industrial groups, were obtained by three different researchers over the reporting period, for a total amount of 297 keuros, including a major one with SANOFI (188 keuros).

Three patents have been filed by the LINC platforms dedicated to drug candidate development (<https://neurosciences.univ-fcomte.fr/plateforme/plateforme-de-developpement-de-candidats-medicaments/>): two of these patents are for new multi-target molecules for Alzheimer's disease.

### Weaknesses and risks linked to the context

No major weakness was evidenced, and the unit should pursue its efforts on interacting with the socio-economic world and in particular to obtain Cifre funding with industries.

### *3/ The unit shares its knowledge with the general public and takes part in debates in society.*

### Strengths and possibilities linked to the context

Beside involvement in a significant number of classical scientific outreach activities, the LINC unit has also been involved in more original and participative activities. The unit's members were involved in 43 productions towards the lay public (TV, radio, print media) including at the national level (« Ça m'intéresse » magazine, Libération, Le Monde, Le Parisien, Femme actuelle, France Inter, France Info, France Musique...), eighteen lay public conferences/debates at the regional level, and three science mediation products (e.g., La Lettre des Neurosciences). In addition, the unit has been involved in two participatory research projects. One was around the evaluation of altered states of consciousness and has involved the public and musicians of the Besançon International Competition for Young Conductors. The main objective was to measure the inter-individual emotional sharing of a group of participants attending a concert by estimating the inter-brain synchrony and to try to evaluate the influence of social aspect of the underlying musical emotion/pleasure. For the second project, in collaboration with an artist, the unit has developed an EEG biofeedback strategy that serves as the basis for various population-based and clinical emotion evaluations. The device was presented and tested during different lay public events (nuit des chercheurs, semaine du cerveau, Hacking Health...). Overall, the committee feels that the unit has perfectly shared its knowledge with the lay public using various ways.

### Weaknesses and risks linked to the context

The committee did not identify major weaknesses regarding the unit's knowledge sharing with the lay public. More direct involvement in patient associations would be nice.

## C - RECOMMENDATIONS TO THE UNIT

### Recommendations regarding the Evaluation Area 1: Profile, resources, and organisation of the unit

To improve readability, structuration, internal collaborations and translational work, the committee strongly recommends organising the unit into well-defined lines of research, all having in common to deal with the questions of decision-making (e.g. Alzheimer's disease, Consciousness, Attention, Theory...). For instance, considering the involvement of the unit in the ProPsy project, the committee recommends introducing the dimension of precision psychiatry/neurology/neuropsychology in the presentation of its project/lines of research.

One scientific seminar per month is organised, which does not seem very frequent given the size of the unit and its multiple locations. The management must ensure that cohesion is maintained and/or reinforced within the unit and that interactions between its members are strengthened to achieve a greater number of collaborative projects. In the same perspective, opportunities for scientific exchange between doctoral and postdoctoral students can also be developed.

### Recommendations regarding the Evaluation Area 2: Attractiveness

To increase visibility, the committee reiterates its recommendation to organise the unit around well-defined lines of research. The recruitment of foreign PhD students or postdoctoral fellows should be increased, and participation in international teaching exchange networks could be improved, particularly by increasing the unit's participation to international congresses on their main research line, i.e. decision-making.



## Recommendations regarding Evaluation Area 3: Scientific Production

During the visit (oral presentations and discussion with the DU), the committee acknowledged the unit strategy to focus on decision-making, which appears sound given the recent inclusion to the unit of investigators in psychology, specialists in the cognitive bases of the decision. The committee recommends increasing collaborative work within and between the different research axes and to better take advantage of the strong potential of this unit for translational research to increase research impact. Such a strategy will help attract more funding for the first two research axes, i.e. decision-making and tDCS for the treatment of some mental disorders.

## Recommendations regarding Evaluation Area 4: Contribution of Research Activities to Society

The committee encourages the unit to pursue its efforts on interacting with the socio-economic world. In particular, the committee suggests enhancing interactions with, and contributions to, patients' associations, if the actual contribution is limited to what is referenced in the self-evaluation document. The committee encourages the unit to pursue its interactions with the general public and acknowledges the originality, the societal and scientific value of the participatory research conducted by some members.

## CONDUCT OF THE INTERVIEWS

### Date(s)

**Start:** 23 janvier 2023 à 8 h 30

**End:** 23 janvier 2023 à 18 h 30

**Interview conducted online**

### INTERVIEW SCHEDULE

**Programme des entretiens d'évaluation**  
**Laboratoire de Recherches Intégratives en Neurosciences et Psychologie Cognitive — URLINC**  
**Date des entretiens (en visio) : Lundi 23 janvier 2023**  
**Directeur actuel du laboratoire : M. Emmanuel Haffen**

**Conseiller Scientifique HCERES :** M. Giovanni Stevanin, Paris

**Comité d'experts :**

Mme Florence Cayetanot, Paris : Représentante CNU

M. Etienne Coutureau, Bordeaux : Expert HCERES

Mme Véronique Deroche, Bordeaux : Expert panel HCERES

Mme Bérengère Guillery-Girard, Caen : Expert HCERES (**Présidente du comité**)

Mme Suzanne Lesage, Paris : Représentante des Personnels d'Appuis à la Recherche

Observateur (excepté lors des huis clos) :

Inserm CSS4: Julien Bastin

**Zoom link 1: (HCERES – Huis clos)**

<https://hceres-fr.zoom.us/j/95810182537?pwd=TIhFUDlzMmsvVEJUbHIBUHh5NVkxdz09>

**Teams link 2: (Interviews avec l'UMR)**

<https://teams.microsoft.com/l/meetup-join/19:3em-GMPX1NCO8uHrJl22eQi3Bkv5eI4m2tY1Xlp6g2Y1@thread.tacv2/1674460412286?context=%7B%22Tid%22:%22ca5a017f-00e6-423c-a8c6-0a1b459f6827%22,%22Oid%22:%226d487ef0-e157-47d4-8980-b5cec97c3fa4%22%7D>

**8:30-9 : 00**      **Accueil du comité de visite en huis clos**

**9 h - 9 h 15**      Présentation du processus d'évaluation par le conseiller scientifique HCERES (Giovanni Stevanin)

**9:15-14 : 30**      **Présentations scientifiques**

**9:15-10 : 00**      Présentation du bilan par le directeur d'unité (Emmanuel Haffen)  
(Thématique de recherche, structuration, RH, finances)  
(20' présentation + 20' discussion)

**10 h - 14 h 30**      Présentations des programmes de recherche  
(15' présentation + 15' discussion)

**10 h**      *Caractérisation de réseaux centraux du contrôle adaptatif de l'appétit*  
*Pierre-Yves Risold (CR Inserm)*

**10:30-11 : 00**      *Pause-café*

**11 h**      *Développement d'une théorie intégrée de la prise de décision et de l'action chez l'homme sain*  
*Mathieu Servant (MCF, IUF, ERC)*

**11 h 30**      *Processus cognitifs de l'attention et de la décision : des sujets sains vers les sujets malades*  
*François Maquestiaux (PR)*

**12 h**      *Maladies neurodégénératives : Intérêt des molécules multicibles comme solution thérapeutique*  
*Lhassane Ismaili (PR)*

**12:30-13 : 30**      *Pause Déjeuner*

**13 h 30**      *Évaluation de la prise de décision chez les patients avec pathologies neurodégénératives*  
*Eloi Magnin (PUPH)*

**14 h**      *Évaluation de l'effet de la tDCS sur la prise de décision dans le trouble borderline*

*Djamila Bennabi (PUPH, PEPR PROPSY)*

- 14:30-16 : 00**                    **Discussions avec le personnel du laboratoire en comités restreints**
- 14:30-15 : 00**    Discussion avec les chercheurs (sans le directeur d'unité)  
     *Gestion des accès* = Adeline Etievant (MCF en neurosciences)
- 15 h - 15 h 30**    Discussion avec les techniciens, ingénieurs et administratifs (sans les chercheurs)  
     *Gestion des accès* = Magali Nicolier (IGR)
- 15:30-16 : 00**    Discussion avec les étudiants et Postdocs (sans les chercheurs)  
     *Gestion des accès* = Lidia Cabeza (postdoc)
- 16 h - 16 h 30**                *Pause-café*
- 16:30-17 : 00**                **Discussion avec le directeur d'unité et le directeur adjoint (huis clos)**
- 17 h - 17 h 30**                Débriefing du comité de visite (huis clos)
- 17:30-18 : 00**                Discussion avec les représentants des Tutelles et représentants locaux
- Représentants des tutelles locales :  
 VP recherche de l'université (UFC et UBFC) : Hugues Daussy  
 Directeur de l'UFR de Pharmacie : Xavier Bertrand
- ITMO – Inserm:  
*Etienne Hirsch*
- Observateur :  
*Inserm CSS4: Jullien Bastin*
- 18 h - 18 h 30**                Débriefing du comité de visite (huis clos)
- 18 h 30**                        Fin de la journée

## PARTICULAR POINT TO BE MENTIONNED

Discussions with the supervising bodies highlighted the regional impact of the unit that concentrates most of the neuroscience research from Besançon and its region. The unit is attractive and is structuring its activities after the local absorption of researchers in psychology. The local division of the unit in three locations should be resolved in the next two years with a grouping in a single local site. The integration of full-time researchers is a lacking point to meet the ambitious translational project of the unit.

## GENERAL OBSERVATIONS OF THE SUPERVISORS

Maison de l'Université

Besançon, le 13 juin 2023

Dossier suivi par :  
Hugues DAUSSY  
tél. (33) 03 81 66 50 04  
recherche@univ-fcomte.fr

Madame, Monsieur,  
Chère collègue, Cher collègue,

L'université de Franche-Comté n'a pas d'observation de portée générale à formuler, en relation avec le rapport d'évaluation du LINC.

Je vous prie d'agréer, Madame, Monsieur, l'expression de ma considération distinguée.

Pour la présidente de l'Université de Franche-Comté, Marie-Christine Woronoff, et par délégation

Le Vice-Président Recherche et Valorisation

Hugues Daussy



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