

Research evaluation



The Center for Integrative Biology (CBI)

UNDER THE SUPERVISION OF THE FOLLOWING INSTITUTIONS AND RESEARCH BODIES:

Centre national de la recherche scientifique – CNRS

Université Toulouse 3 - Paul Sabatier - UPS

EVALUATION CAMPAIGN 2019-2020GROUP A

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In the name of Hcéres¹:

Nelly Dupin, Acting President In the name of the experts committee2:

Catherine Jessus, Chairwoman of the committee

Under the decree No.2014-1365 dated 14 November 2014,

¹ The president of Hcéres "countersigns the evaluation reports set up by the experts committees and signed by their chairman." (Article 8, paragraph 5);

² The evaluation reports "are signed by the chairman of the experts committee". (Article 11, paragraph 2).



Tables in this document were filled with data submitted by the supervising body on behalf the federative structure.

FEDERATIVE STRUCTURE PRESENTATION

Federation name: The Center for Integrative Biology

Federation acronyme: CBI

Current label and N°: FR 3743

ID RNSR: n/a

Application type: Renewal

Head of the federation

(2019-2020): Mr Didier Trouche

Project leader

(2021-2025): Ms Fabienne PITUELLO

EXPERTS COMMITTEE MEMBERS

Chair: Ms Catherine Jessus, CNRS Paris

Experts: Ms Anne-Émilie ALLAIN, CNRS Bordeaux (supporting personnel)

Mr José Halloy, Université de Paris

Ms Muriel Perron, CNRS Orsay (representative of CoNRS)

Mr Pascal THEROND, CNRS Nice

HCÉRES REPRESENTATIVE

Mr Pierre Couble

REPRESENTATIVES OF SUPERVISING INSTITUTIONS AND BODIES

Mr Christophe GIRAUD, CNRS

Mr Hervé Moreau, CNRS

Mr Alexis Valentin, Université Paul Sabatier – Toulouse 3



INTRODUCTION

HISTORY AND GEOGRAPHIC LOCALISATION OF THE MEMBERS

The CBI was created in 2016 as a Federative Research Institute of biology with the CNRS and the University Paul Sabatier as host institutions. It regroups five units, core facilities and services:

- The CBD, Centre de Biologie du Développement (UMR 5547)
- The CRCA, Centre de Recherches sur la Cognition Animale (UMR 5169)
- The LBCMCP, Laboratoire de Biologie Cellulaire et Moléculaire du Contrôle de la Prolifération (UMR 5088)
- The LBME, Laboratoire de Biologie Moléculaire Eucaryote (UMR 5099)
- The LMGM, Laboratoire de Microbiologie et Génétique Moléculaires (UMR 5100)
- 8 core facilities
- 5 services

In the next contract starting on January 2021, the CBI will include 3 units resulting from a reorganization of the current 5 units:

- Microbiology
- Molecular, Cellular and Developmental Biology
- Animal Cognition

The CBI comprises 40 research teams (assigned to the 5 research units or 3 future units) and about 400 people. Among them, 260 are permanent employees of the University, CNRS and Inserm including 101 researchers, 47 associate or full professors and 111 technicians/administrative/engineers. Among the technical staff, 29 are actually affected to the CBI core facilities and services and directly under CBI management. This number will increase to 51 in the next contract.

The CBI is located on the multidisciplinary campus of the University Paul Sabatier (UT3) in Toulouse. It is currently housed in two locations: the LBME and LMGM units are housed in a building called "IBCG" and the 3 other units are hosted in an obsolete building (4R3 building). The construction of a new building, called 4R4, in direct connection with the existing "IBCG" building, is nearing completion and will bring together on a single site, in the course of 2020, all CBI staffs. The CBI will occupy approximately 18,000 m² of space in the CNRS "IBCG" building and the University 4R4 building.

MANAGEMENT TEAM

The CBI (for "Centre de Biologie Intégrative") is currently under the direction of Didier TROUCHE, and Pierre-Emmanuel GLEIZES, Deputy-Director. For the next contract, Fabienne PITUELLO is proposed as Director, and François CORNET as Deputy-Director.

The Direction Board also includes the Directors and Deputy-Directors of the units belonging to the CBI. Currently:

- Fabienne PITUELLO, head of the CBD,
- Claire Rampon and Raphaël Jeanson, heads of the CRCA,
- Didier Trouche and Sylvie Tournier, heads of the LBCMCP,
- Pierre-Emmanuel GLEIZES, head of the LBME,
- Patrice Polard and Cécile Albenne, heads of the LMGM.



For the next contract, the Directors and Deputy-Directors of the 3 future units will participate in the Direction Board:

- Patrice Polard and Cécile Albenne, heads of the Unit "Microbiology",
- Kertin Bystricky and Patrick Blader, heads of the Unit "Molecular, Cellular and Developmental Biology",
- Claire RAMPON and Raphaël JEANSON, heads of the Unit "Animal Cognition".

The CBI also benefits from a scientific council, composed of representatives of the units and representatives of the main scientific topics of the CBI and the core facilities, which is a driving force for the CBI scientific strategy.

HCÉRES NOMENCLATURE

- SVE2.1 Biologie moléculaire et structurale, biochimie
- SVE2.2 Génétique, génomique, bioinformatique, biologie systémique
- SVE2.3 Biologie cellulaire, biologie du développement animal
- SVE3.1 Microbiologie
- SVE4 Neurosciences

SCIENTIFIC DOMAIN

The global scientific objective of the CBI is to decipher the complexity of living organisms at different scales, from molecules to organisms and animal societies, using multi-disciplinary approaches and a large panel of model organisms.

Research topics of the CBI teams span the following areas: microbial systems; chromosome dynamics, maintenance and evolution; dynamics, structure, function and evolution of molecular complexes; cell cycle, dynamics and mechanics; stem cells and developmental biology; molecular and cellular neurobiology; multiscale approaches to cognitive processes and behaviour.

The main objectives of the CBI are to coordinate the scientific policy of the site, increase the international visibility and attractiveness of the CBI, organise the core facilities and the support services into unified professionalized services, support the construction of the new 4R4 building and organize the allocation of space in a functional manner.

WORKFORCE SPECIFICALLY ALLOCATED TO THE FEDERATIVE STRUCTURE

In 2016, at the time of the CBI creation, only 3 people were affiliated to the Research Federation: a financial manager, the head of the computer graphics service and the head of electron microscopy facility.

In 2019, 29 people, technicians, engineers and administrative staff, were affected to the CBI.

This number will increase to 51 in the next contract, starting in 2021.

These agents, either employees of CNRS (40 of them) or University Paul Sabatier (11 of them), are working in the core facilities and services and are directly under CBI management.



GLOBAL ASSESSMENTS OF THE FEDERATIVE STRUCTURE

A first objective was to coordinate the scientific activities of the 5 units that comprise the CBI. This aim has been achieved by defining 4 transversal scientific axes and the implementation of specific actions, such as funding for internal collaborations, recruitment of group leaders, a PhD program, an internal training program and dynamic scientific animation. In addition, CBI has been deeply involved in the design of a new building where it will move soon. Everything has been designed for a sharing of spaces to promote synergy between the activities of the different units. The committee appreciated the considerable efforts made since 2016, which have transformed a group of 5 weakly coordinated units into a dynamic and coherent collective driven by clear guidelines. It recommends to pursue this strategy and, if possible, to increase the financial and human support dedicated to the various actions.

A second goal was to increase the international visibility of the CBI. Several procedures were set up, as international calls for recruiting new teams, the creation of an international collaboration service, funding for international collaborative projects. These efforts have been successful as evidenced by 6 ERC and other European and international grants, or PhDs under international co-tutorship. The CBI is encouraged to continue on this track.

A third objective was to organise the core facilities and the support services into unified professionalized services. The CBI developed the core facilities previously distributed in the 5 research units and created 3 additional facilities. All support services were combined and now depend on the CBI. This has been achieved through a deep reorganisation and the transfer of staff from the units to the CBI. This reorganization brings opening and clarification. It must be maintained and amplified. Some of these facilities have been or will be weakened by staff retirement. The trustees must ensure the replacement of this technical staff, which is decisive for the sustainability of high standard services.

A last goal was to elaborate the scientific project and the future structuration of the CBI. This led to the proposal to renew the CBI as a federation of units and to restructure the current 5 units into 3. It will be necessary in 2023 at the latest, to analyse whether the new structure is an appropriate balance for the site's activities.

To conclude, the 4 missions defined above must be continued by the CBI in the next contract. The CBI is on a very positive track and has succeeded in transforming the site into a major scientific player thanks to an ambitious and successful mutualisation policy. It must nevertheless be aware that the project is not yet in equilibrium and that this first decisive and successful step must be followed by consolidating actions in terms of the functional organization of the CBI and the definition of its future scientific project.

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