



Unit of Functional & Adaptive Biology

Université Paris Cité, CNRS UMR 8251

<https://bfa.u-paris.fr>



General overview

The Unit of Functional and Adaptive Biology (BFA) is one of the Research Units present on the Grands Moulins Campus of Université Paris Cité. The BFA unit conducts research in Integrative Biology. Research topics in BFA aim to better understand the biological mechanisms underlying human adaptation to environmental and/or internal perturbations (endocrine, metabolic or genetic inputs) in physiological or pathophysiological contexts. Current research topics include five main scientific domains: Nutrition, Degenerative pathologies and aging, Reproduction, Toxicology, Computational Modeling. Investigations rely on a wide array of methodologies ranging from cellular, biochemical, molecular and computer-based approaches to non-invasive analysis of physiological parameters.

The unit, UMR 8251 CNRS – Université Paris Cité, is composed of 8 research teams among which, 2 constitute the ERL INSERM U1133. BFA comprises 45 researchers with teaching duties and full time researchers, 5 clinicians and 25 engineers, technicians and administrative assistants. There are also about 30-40 non-permanent staff (PhD students and postdoctoral fellows/contracts) and about 50 trainees. The Director is Jean-Marie Dupret and the deputy director is Joëlle Cohen-Tannoudji, both professors at Université Paris Cité.

Research

- Team 1 - Leader: Pr Jamileh Movassat
Biology and Pathology of the Endocrine Pancreas
- Team 2 - Leader: Pr Christophe Magnan
Regulation of Glycemia by Central Nervous System
- Team 3, INSERM ERL U1133 - Leader: Pr Joëlle Cohen-Tannoudji
Physiology of Gonadotrope Axis
- Team 4 - Leader: Dr Ana Ferreiro
Basic and Translational Myology
- Team 5 - Leader: Dr Serge Luquet
Central Control of Feeding Behaviour and Energy Expenditure
- Team 6 - Leader: Pr Jean-Marie Dupret
Molecular and Cellular Responses to Xenobiotics
- Team 7 - Leader: Dr Véronique Monnier
Degenerative Processes, Stress and Aging
- Team 8, INSERM ERL U1133 - Leader: Dr Pierre Tufféry
Computational Modeling of Protein-Ligand Interactions

Core Facilities

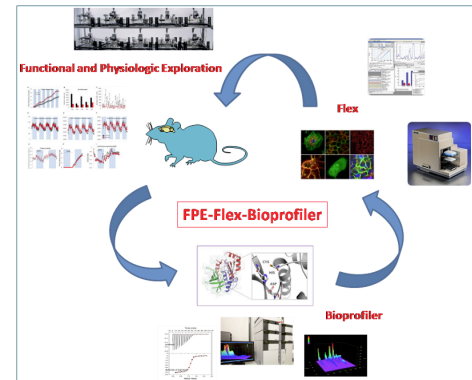
The BFA unit hosts an IBiSA Structural Bioinformatics Platform (RPBS), a Metabolism Platform and two technical facilities.

- The Structural bioinformatics platform RPBS (Parisian Resource in Structural Bioinformatics; head: Dr Pierre Tufféry, Dr Julien Rey) is IBiSA certified and is a member of the French Institute of Bioinformatics (IFB).



- The Metabolism Platform (coordination: Pr Jean-Marie Dupret) is currently composed of three interplaying technical facilities:

- The Functional and Physiological Exploration (FPE) facility (head: Dr Serge Luquet, Julien Castel),
- The FlexStation facility (head: Eloïse Airaud),
- The Bioprofiler facility (head: Pr Jean-Marie Dupret, Pr Fernando Rodrigues-Lima, Dr Linh-Chi Bui).



- • Evanescent wave imaging system (TIRFM) and cytometry (FACS) (head: Dr Cécile Tourrel-Cuzin)
- Confocal and inverted microscopes, quantitative microscopy, fluorescence stereomicroscope (head: Dr Florence Delort).

Information

BFA :
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Université Paris Cité :
<https://u-paris.fr/>

CNRS-INSB :
<https://insb.cnrs.fr/>

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