

Exploring the dynamics of proteomes

On the strength of more than 20 years' experience and through its platform EDyP-Service, EDyP laboratory offers the scientific community access to cutting edge technologies for protein and proteome characterisation.

These methods can be used to respond to requests ranging from fine characterisation of a protein to pan-proteome study at the scale of a whole organism or absolute quantification of biomarkers.

- The laboratory is ISO9001:2015- and NFX 50-900-certified
- EDyP is one of the three founding nodes of ProFI, the Proteomics French Infrastructure (<http://www.profi-proteomics.fr>)
- The certified platform is an IBiSA platform (<http://www.ibisa.net>)



Expertises

- **Characterise**
complex proteomes (inventory and abundance of proteins)
- **Study**
how changes to environmental conditions or mutations affect your proteome of interest
- **Identify**
partners of a protein of interest
- **Validate and quantify**
protein biomarkers in a clinical context
- **Evaluate (absolute quantification)**
candidate biomarkers of diseases
- **Identify and quantify**
post-translational modifications
- **Characterise**
protein and complex structures (crosslinking-MS)

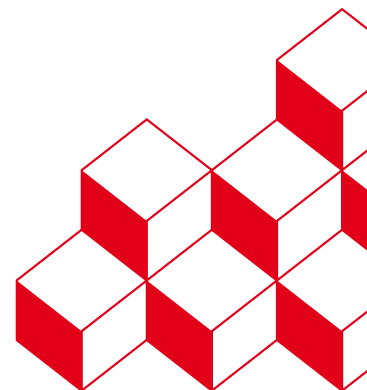
Focus

In the framexork of the investments for the future,

as a member of the Proteomics French Infrastructure (ProFI), the EDyP team received a 5 million grant for the 2012-2024 period.

This funding was used to finance an ambitious R&D programme in the fields of bioanalysis and characterisation of complex biological samples as well as to equip the infrastructure with cutting-edge instruments.

> The developments made allow us to propose an expert service to the French academic and industrial communities as part of collaborations or paid-for services..



Technology and tools

- **5 instrument platforms** combining liquid chromatography (micro- and nano-flow) and very high-resolution mass spectrometry of the ORBITRAP type
- **2 sample** preparation robots
- **Dedicated software environment**, developed within the team for data analysis and sample and analysis management

Services

- **Personalised advice** to identify the most appropriate strategy
- **Specific technical assistance** for preparation of your samples
- **Full management** of the service
- **Return of results** with advice to help you understand and exploit them

Highlights

Nature Communication 2023

RSL24D1 sustains steady-state ribosome biogenesis and pluripotency translational programs in embryonic stem cells.

Cancer Discovery 2022

SMYD3 impedes small cell lung cancer sensitivity to alkylation damage through RNF13A methylation-phosphorylation crosstalk

Hepatology 2022

Hepatic inflammation elicits production of proinflammatory netrin-1 through exclusive activation of translation

Neuron 2022

Developmental defects in Huntington's disease show that axonal growth and microtubule reorganization require NUMA1



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