

Dermatology & Cosmetology



CLIC-IMAGING core facility at the University of Lille offers a wide range of mass spectrometry services for private and public laboratories. We offer services around many domains as dermatology and cosmetics including Mass spectrometry imaging and (Micro-) proteomics analysis. Benefits of these techniques for dermatology and cosmetics studies are to allow a precise monitoring of compounds penetration, potential effects on endogenous molecules (metabolites, lipids, proteins...), toxicity response and deciphering of signaling pathways associated to physiopathology for therapeutic target discovery.

CLIC-IMAGING will assist you throughout all steps of your project from your sample preparation to the data analysis.



- ✓ **Preparation services including** proteins extraction, in-gel or in-solution digestion, use of various enzymes, protein assay.
- ✓ **Mass spectrometry based analysis:** MALDI-TOF/TOF, MALDI-LTQ-Orbitrap, ESI (IMS) Q-TOF, nanoLC coupled with orbitrap MS & MS/MS.
- ✓ **Innovative technologies:** Mass spectrometry imaging and spatially-resolved proteomics.
- ✓ **Data processing and statistical analysis** for identifications and relative quantification of markers.

All these cutting-edge mass spectrometry experimental combined to computational techniques allow you to obtain relevant biological significance.



Customers type

Academics • Companies



Modality

Service delivery • Service contract • Research contract



References

Pharmaceutical groups specialized in cosmetology and dermatology • CIMI Paris

Keywords : Mass spectrometry based analysis; Mass spectrometry imaging; Skin penetration; Metabolites monitoring; Multi-omics analysis.

Expertise & Competences

- ✓ So far, we have successfully **analyzed** more than 5,000 samples, from over 30 different customers.
- ✓ **Expertise in large sample cohort analysis** (over 200 different samples at a time).
- ✓ **Expertise with different Fresh frozen and FFPE samples.**
- ✓ **Expertise with skin tissue, isolated skin layer, hair follicles** (hair root and bulb).
- ✓ **Suited preparation to your sample** independently of the amount of material (large to micro-sample).
- ✓ **Exogenous compounds targetting** in skin substructures with MSI.
- ✓ **Combined multi-omics analysis** (metabolomics, lipidomics and proteomics).

The staff at the platform make their expertise available directly to the customer for the design, execution and analysis of your experiments.

Contact

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Avantages

- Access to next generation instruments (Rapiflex, Orbitrap and DESI-IMS QTof).
- True (un-)targeted discovery.
- Multi-Omics analysis.

Members of CLIC-IMAGING platform lead research efforts in proteomics area to apply these cutting-edge methods to answer your question.

Publications

- *Biochim Biophys Acta Gen Subj.*, 2016, doi: 10.1016/j.bbagen.2016.10.021
- *Scientific Reports*, 2016, doi: 10.1038/srep25919
- *PLoS One*, 2012, doi: 10.1371/journal.pone.0050180
- *Anal Biochem.*, 2013, doi: 10.1016/j.jab.2012.10.035
- *Methods Mol Biol.*, 2017, doi: 10.1007/978-1-4939-6952-4_2
- *Methods Mol Biol.* 2017, doi: 10.1007/978-1-4939-7051-3_6



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