


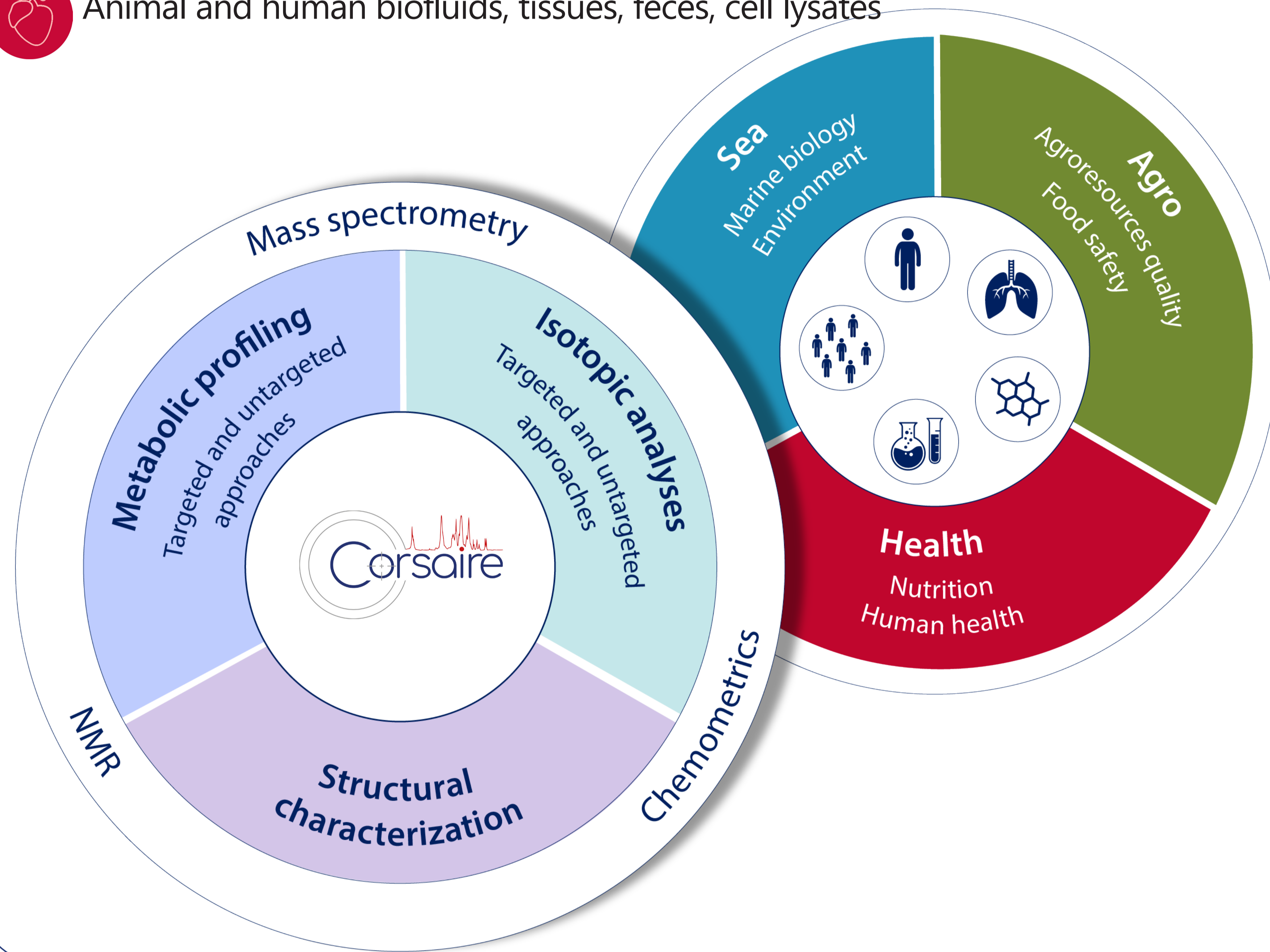


# Metabolomics platform of the West of France

## The scientific skills and technologies of Corsaire

### Our scope of applications

-  Sea water, fishes, shellfishes, algae, microorganisms, growing medium
-  Seeds, leaf, roots, buds, tubers of plants and vegetal extracts
-  Animal and human biofluids, tissues, feces, cell lysates



### Our approaches

#### Metabolic profiling

- Targeted (fatty acids, amino acids, sugars, COVs, phyto-hormones, sterols, endocrine disruptors...).
- Untargeted (metabolomics or lipidomics)

#### Structural elucidation

- Metabolites
- Toxins
- Markers of exposure or effect

#### Isotopic analysis

- Fluxomics

### Our analytical methods

#### Mass spectrometry

- Paired with LC, GC, SFC
- EI, CI, ESI, APCI
- MS, MS/MS, MS<sup>n</sup> detection, HRMS, MS/HRMS

#### Nuclear Magnetic Resonance

- 1D: <sup>1</sup>H, <sup>13</sup>C, <sup>15</sup>N
- 2D: <sup>1</sup>H-<sup>1</sup>H, <sup>1</sup>H-<sup>13</sup>C, <sup>1</sup>H-<sup>15</sup>N, fast quantitative 2D

#### Chemometrics

- Data processing
- Galaxy-W4M
- Univariate and multivariate statistical analysis for biomarkers identification

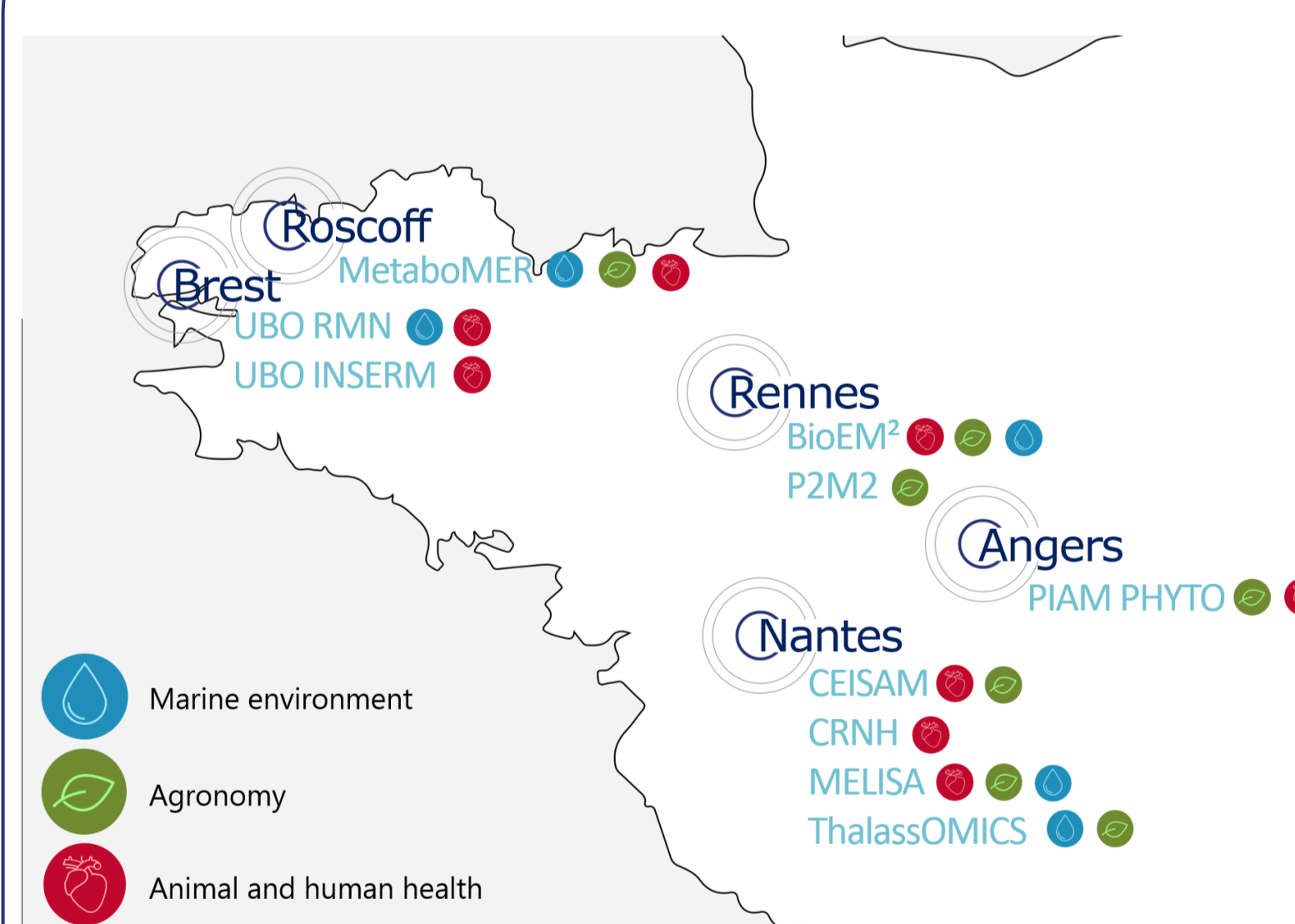
## Services

Corsaire holds cutting-edge technologies and various skills and can offer you, whether you are from academia or industry:

- ✓ to perform your analysis,
- ✓ to access the instruments,
- ✓ to provide training on their use.



## Complementary analytical skills



Corsaire gathers several teams which present complementary skills around NMR and MS-based metabolomics and which can be applied to marine environmental, agronomy and health research.

## Networks & Trainings

Corsaire is involved in the Structural and Metabolomics Analysis Network of Biogenouest as well as the French Network of Metabolomics & Fluxomics (RFMF) and collaborates with MetaboHUB.

Corsaire also participates to doctoral training (doctoral school of Bretagne and Pays de la Loire regions) and several Master's degree such as A3M, P<sup>2</sup>AON or BAS, spread all over the West of France

## Contacts

### Scientific directors:

Alain Bouchereau & Bruno Le Bizec

For further information or request:  
[contact-corsaire@biogenouest.org](mailto:contact-corsaire@biogenouest.org)  
[www.pf-corsaire.org](http://www.pf-corsaire.org)