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# Metabolic profiles of complex fermentation matrices from cream and bakery industry

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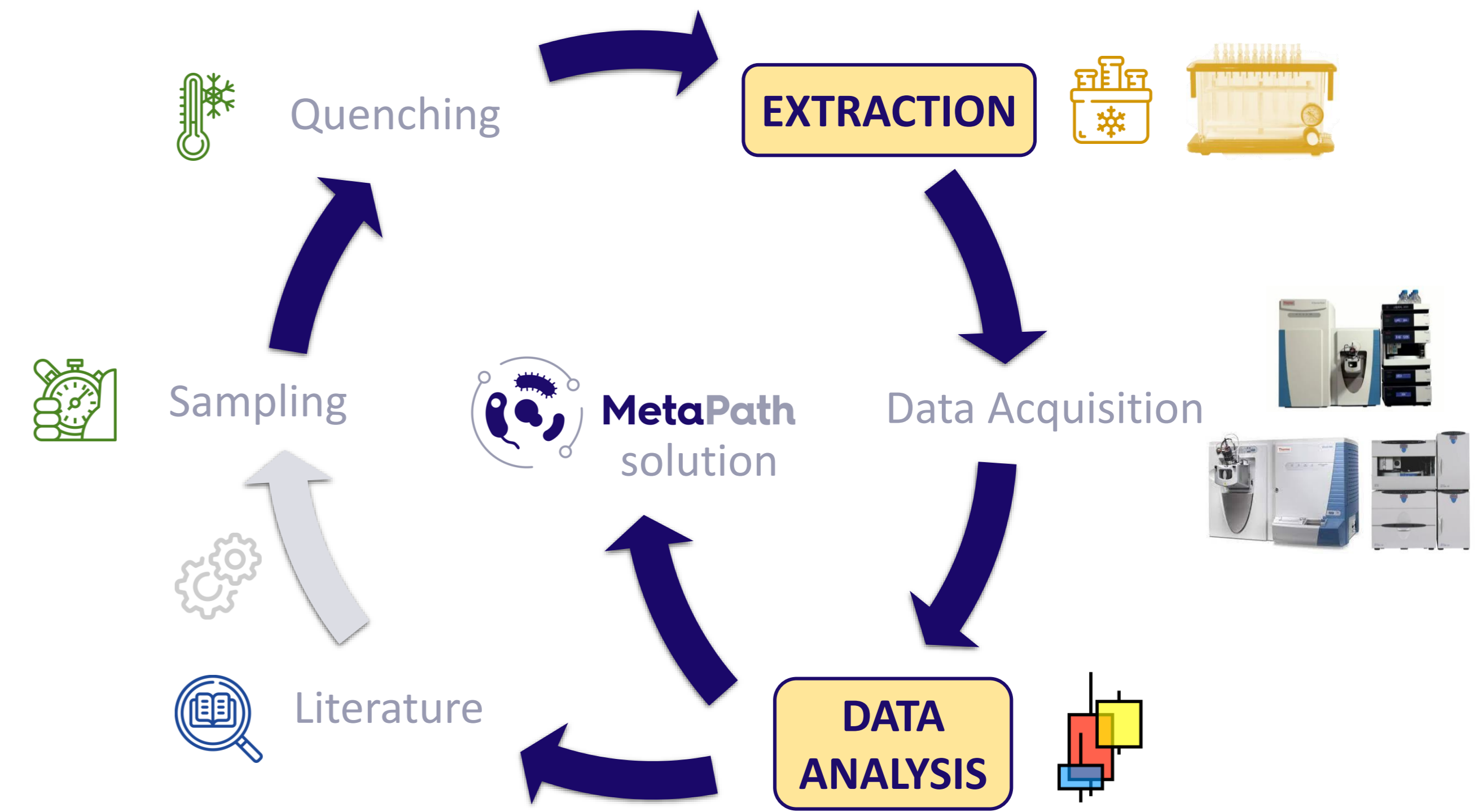
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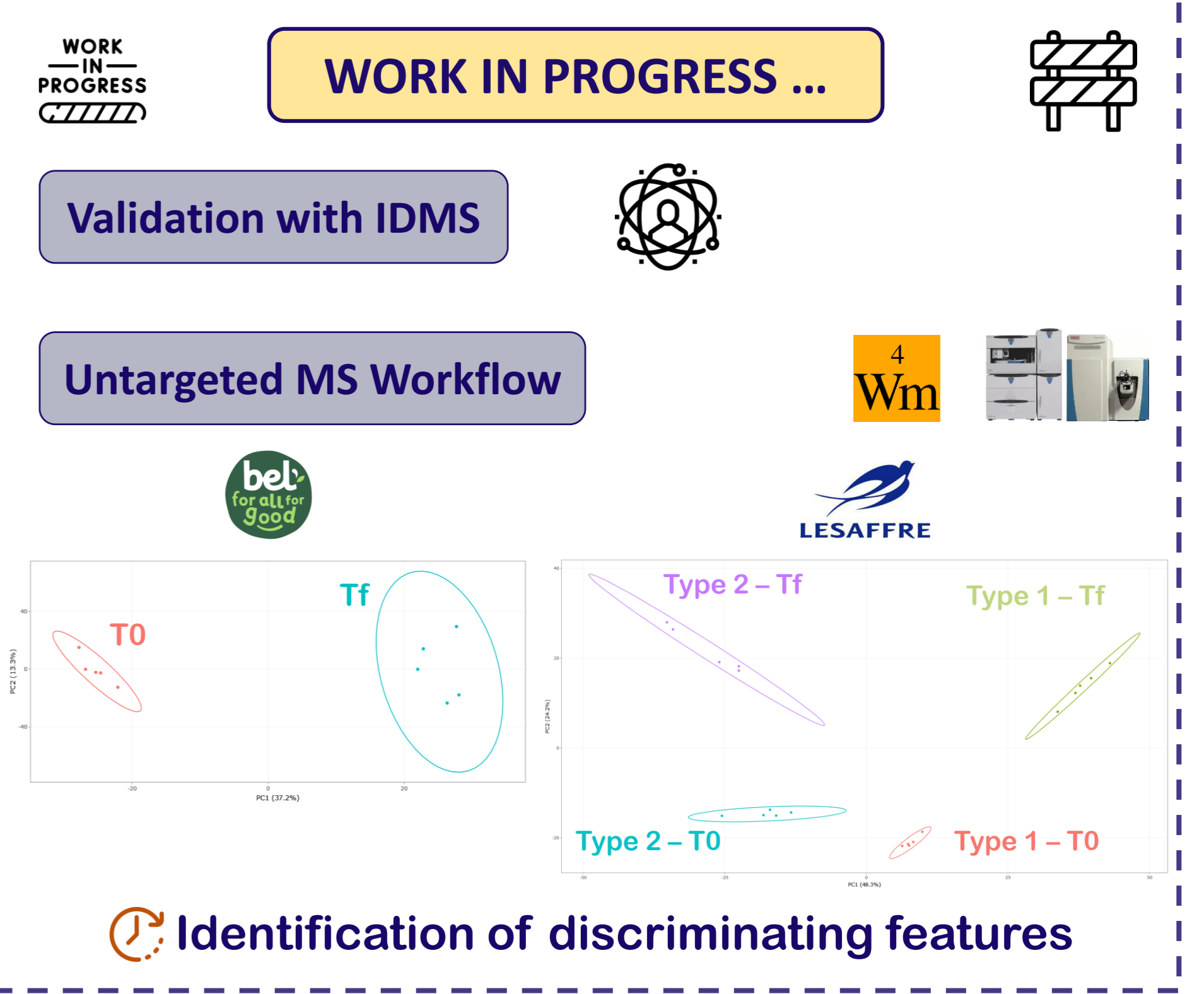
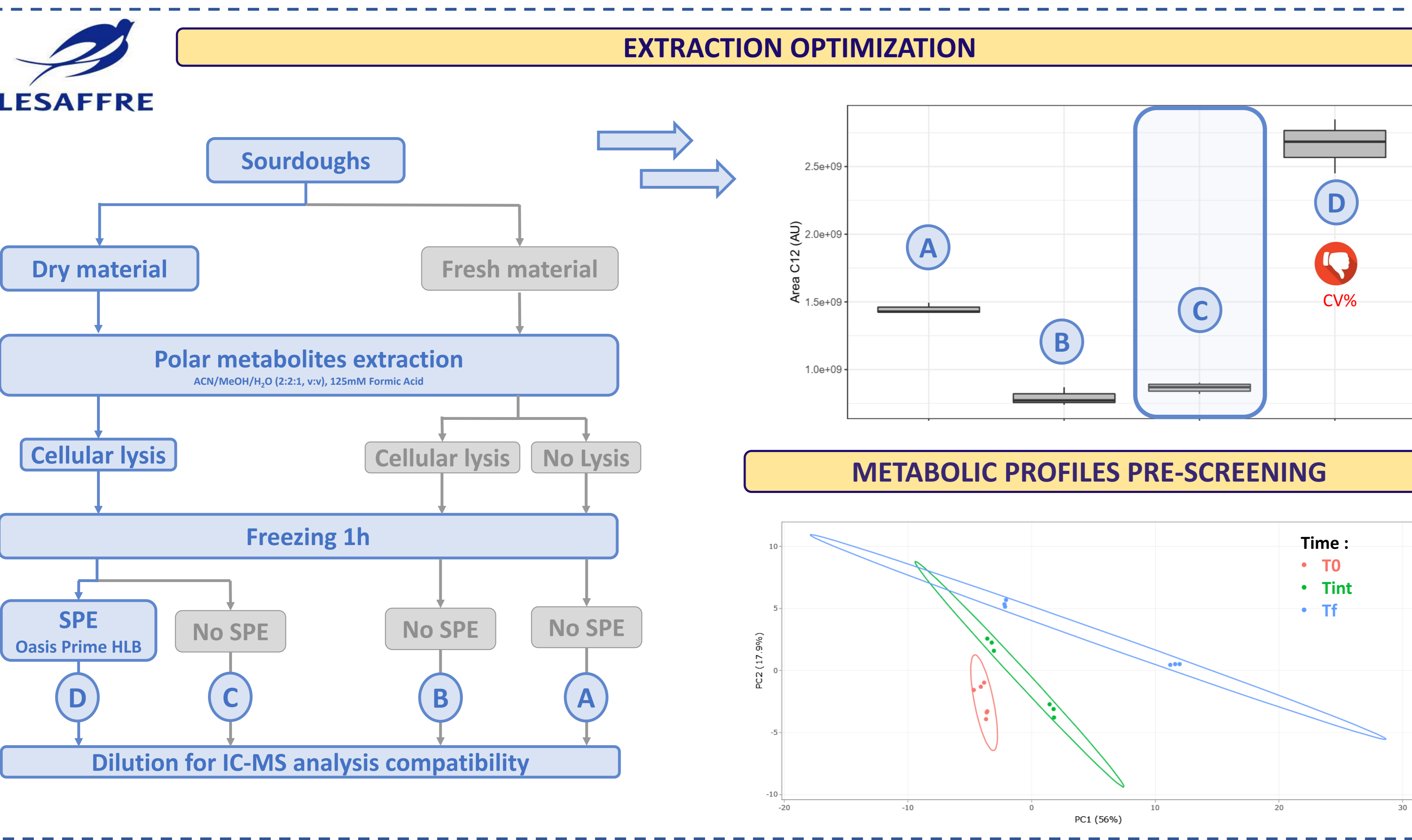
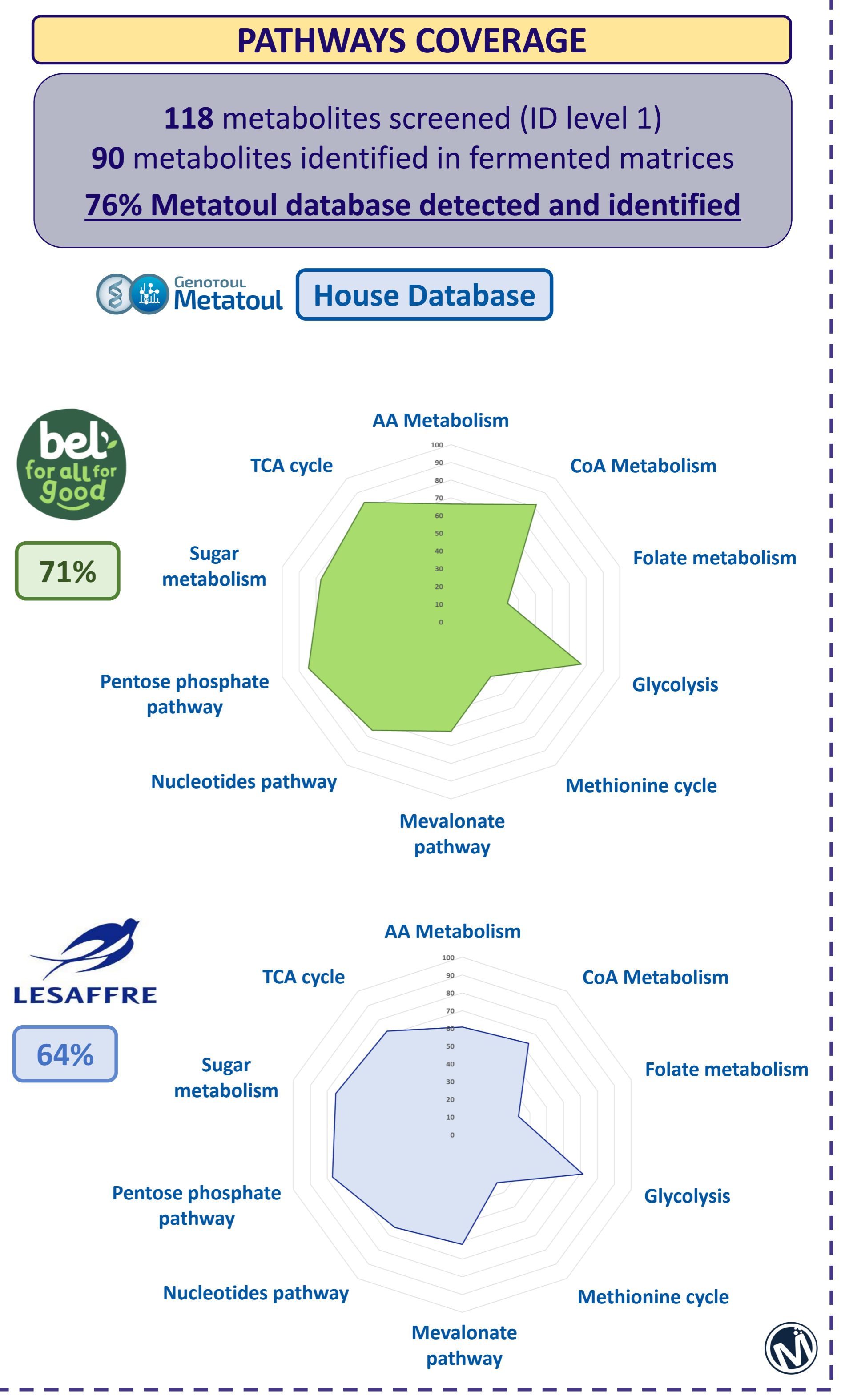
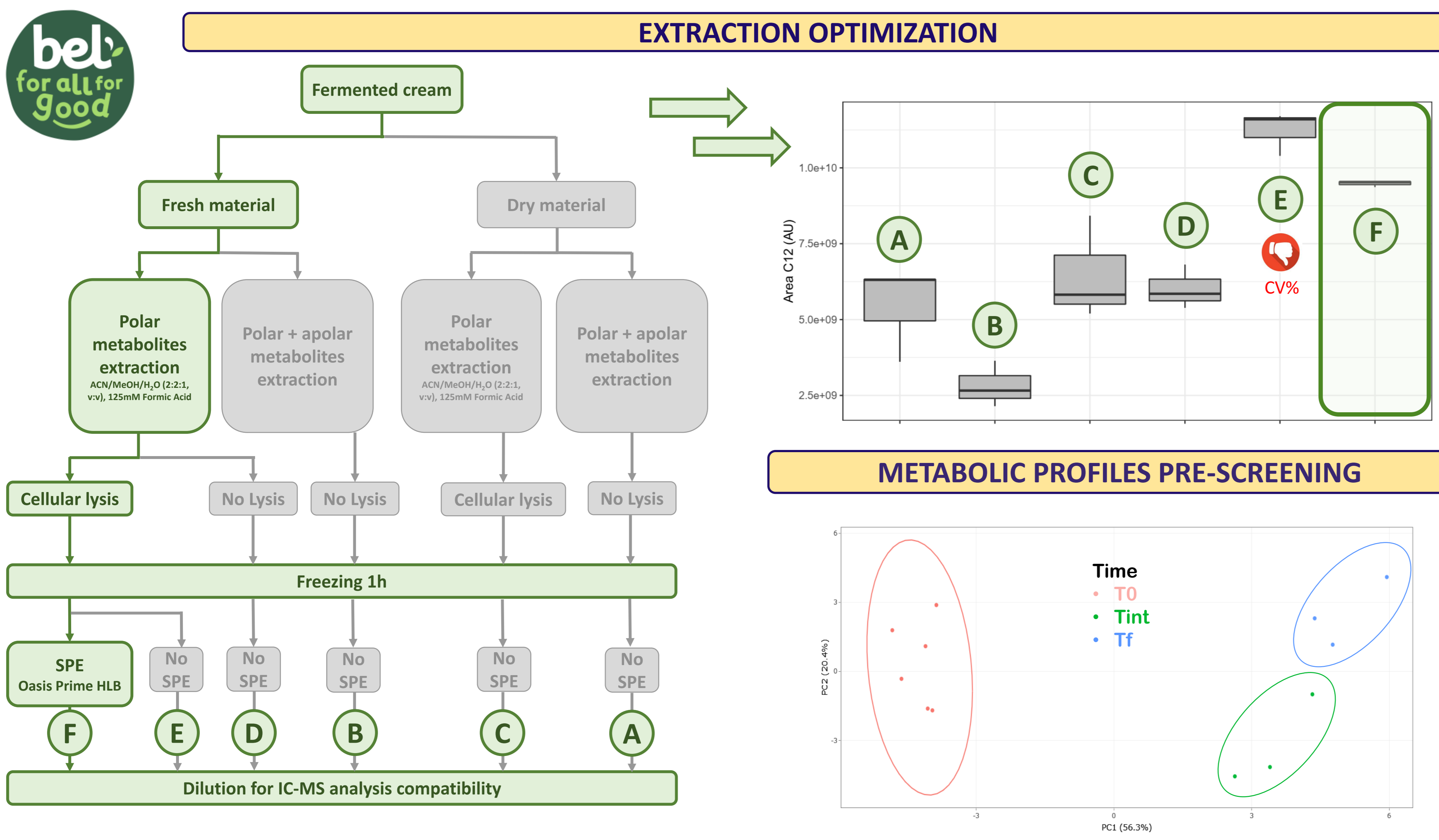
## Introduction

Microbial ecosystems are key factors in food production by fermentation. The metabolic potential of ecosystems is very important and varies depending on the ecosystem composition and the metabolic capacity of the different partners. The construction of the **metabolic map** of an ecosystem is an important tool to understand, develop and use these metabolic capacities. In this context the **MetaPath Bpi France project** aims to develop an integrated solution allowing this modeling. In this context, the **MetaToul platform** aims to develop methods adapted to different food matrices for study of the metabolism, the most accurate and global possible of these different cellular ecosystems. Our main action is first of all to develop, on these complex fermented cream and sourdoughs, **the extraction and global analysis of the central and energetic metabolism.**

## Material and methods



## Results and discussion



## Conclusions

Different sampling and sample extraction systems have been tested and remain to be **validated**. They allow the detection of **central and energetic metabolism** but also a wider detection. We currently cover the main pathways of the studied microorganisms and they will be used for the **reconstruction of metabolic maps of the studied ecosystems**. These systems will be used on different conditions of culture and ecosystems.

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