



# Phenobio+

**A 5-Year Research Chair, Where Science and Industry Work Together for the Investigation of the Polyphenols Health Benefits**

*Noémie Daniel, Symrise, 5<sup>th</sup> of October*



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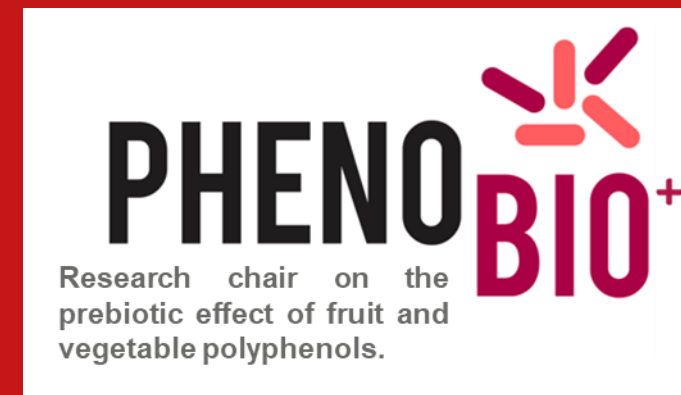


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**Symrise offers health actives for human and pet**

**Science is at the core of our innovative Health solutions**

# Phenobio + a 5-year Research Chair

Industrial Research Chair of the  
CRSNG-Diana Food on the prebiotic  
effect of fruits and légumes  
polyphenols



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Fernando Forato  
Laurence Daoust



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*Francis  
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**Emile Levy**



# The research program



Investigate the potential of polyphenols metabolization by several *L. plantarum* strains

Investigate the prebiotic beneficial effects of fruits/vegetable/sidestream products polyphenols

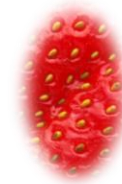


Set up microbiota and intestinal in vitro systems

Implementation of analytical platforms for metabolomics and metagenomics

# The research program

## The Prebiocran™ example



Sidestream products

Extracts, pomaces...

Investigate the prebiotic beneficial effects of fruits/vegetable/sidestream products polyphenols

Berries



Clinical study



Animal models of metabolic disorders

prebiocran™ 

M-SHIME artificial human digestion model



Organoids complex *in vitro* model

*In vitro* cell line models

A systemic scientific approach

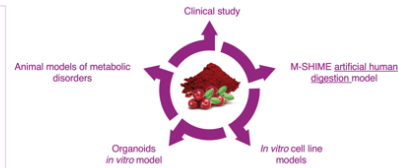
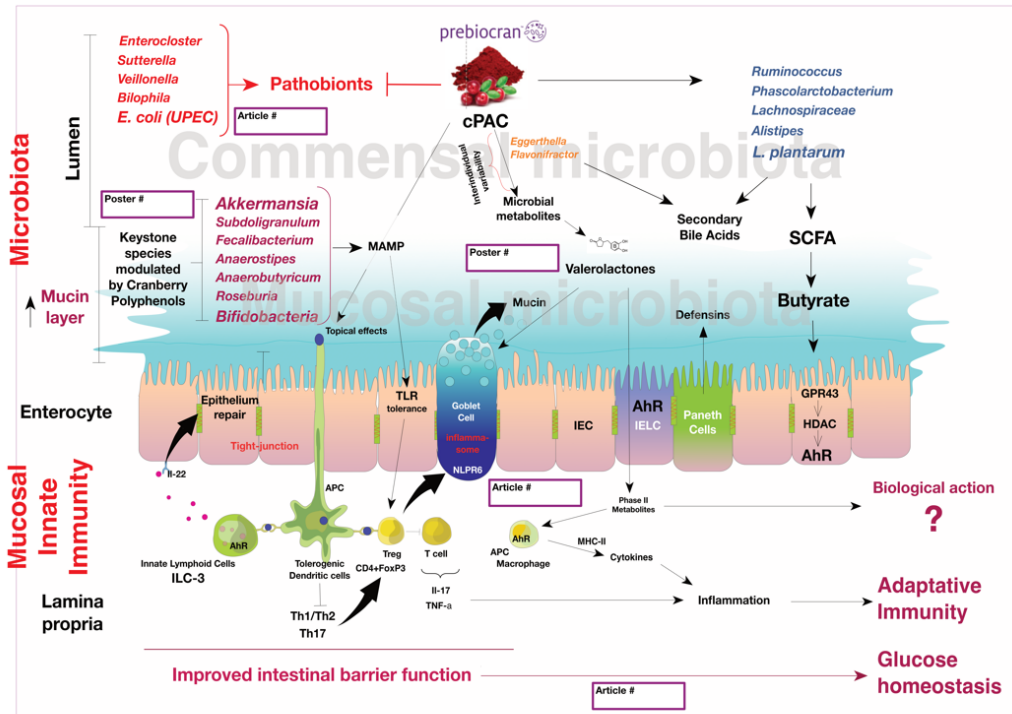
# Go to talk to the students !



## Chaire partenariale Symrise/CRSNG sur l'effet prébiotique des polyphénols de petits fruits



symrise



### Objectifs

- Évaluer les effets prébiotiques de divers extraits de fruits sur la croissance de bactéries coliques bénéfiques
- Développer une nouvelle gamme de pré- et probiotiques efficaces

### Réalisations

- Développement et objectivation d'un nouvel extrait prébiotique: **prebiocran**
- Élucidation des mécanismes d'action des procyanidines de canneberge au niveau de l'intestin
- Caractérisation de la variabilité interindividuelle dans un contexte de nutrition personnalisée
- Développement de nouveaux outils analytiques à haut-débit



**Posters 19, 24 & 31**