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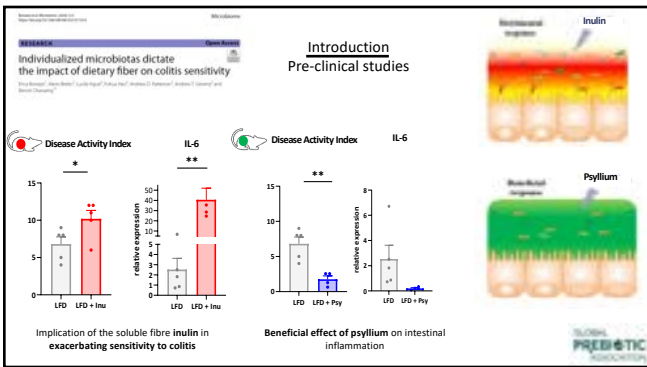
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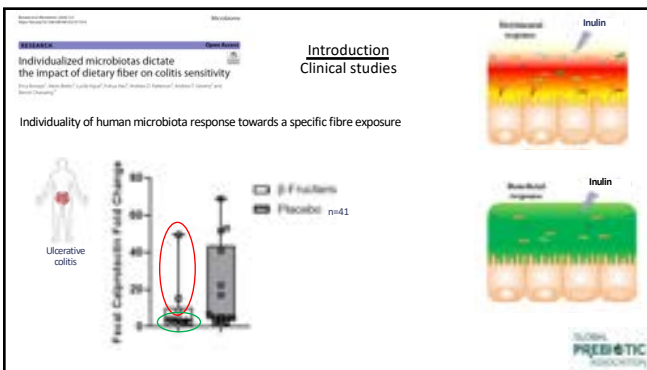
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Methodology- *in vitro* experiments

Individualized microbiotas dictate the impact of dietary fiber on colitis sensitivity

The MBRA system: an *in vitro*, continuous fermentation system

PREBIOTIC ASSOCIATION

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Methodology- *in vitro* experiments

Individualized microbiotas dictate the impact of dietary fiber on colitis sensitivity

The MBRA system: an *in vitro*, continuous fermentation system

Inulin/Psyllium /Cellulose

Daily samples collection

Microbiota composition Pro-inflammatory potential Bacterial load

PREBIOTIC ASSOCIATION

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Results – Impacts of fibers on the composition and pro-inflammatory potential of human intestinal microbiotas *ex vivo* are highly donor specific

Microbiota composition

Beta diversity

Inulin Psyllium

Beta Diversity

Time (hours)

D1 D2 D3 D4 D5 D6

High variability in microbiota responsiveness in terms of microbiota composition upon exposure to either soluble fibre inulin or psyllium

PREBIOTIC ASSOCIATION

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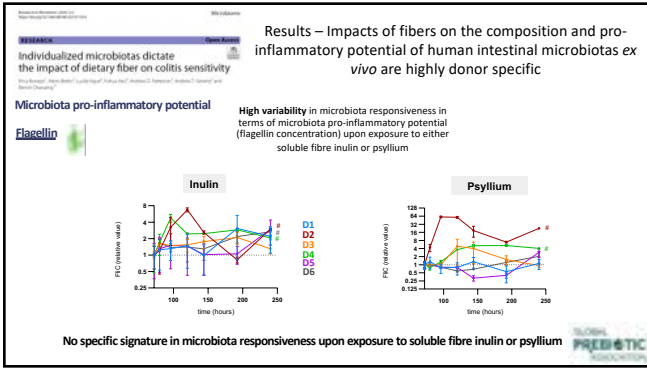
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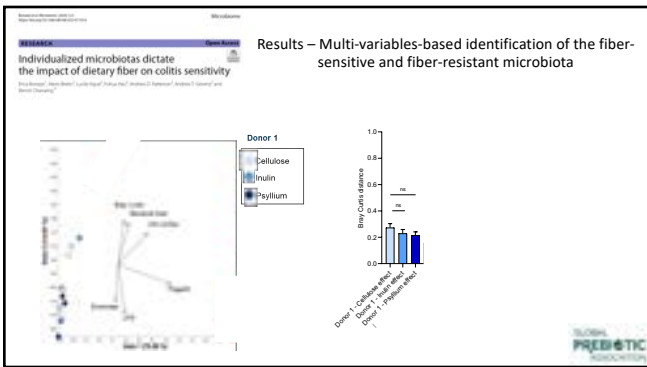
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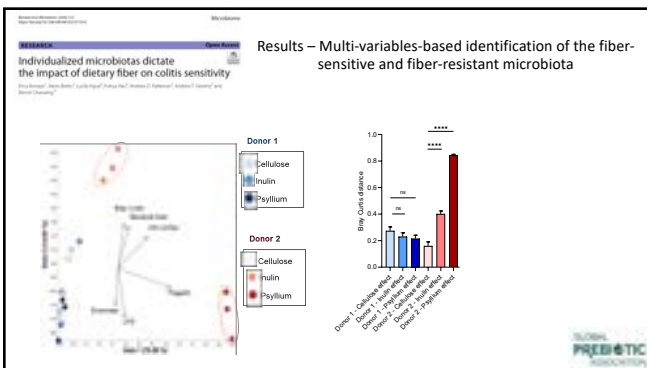
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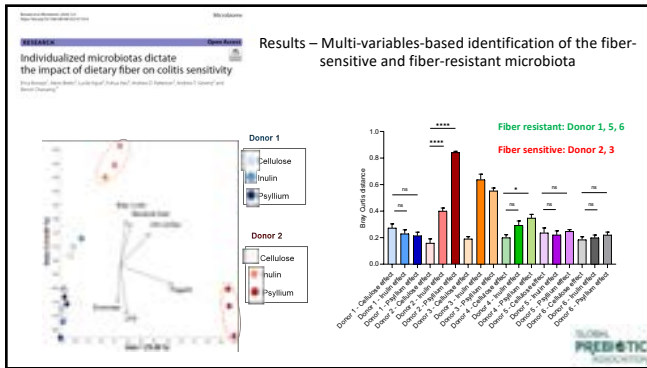
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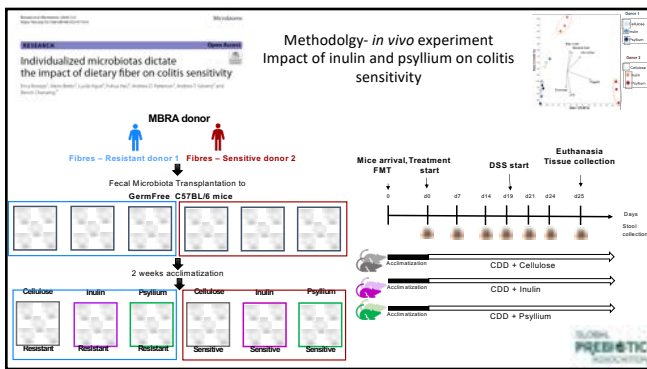
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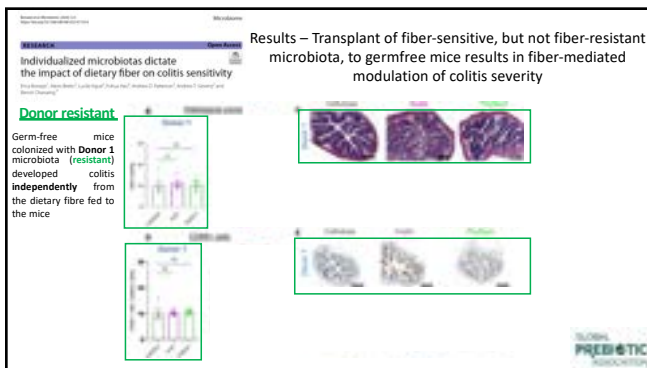
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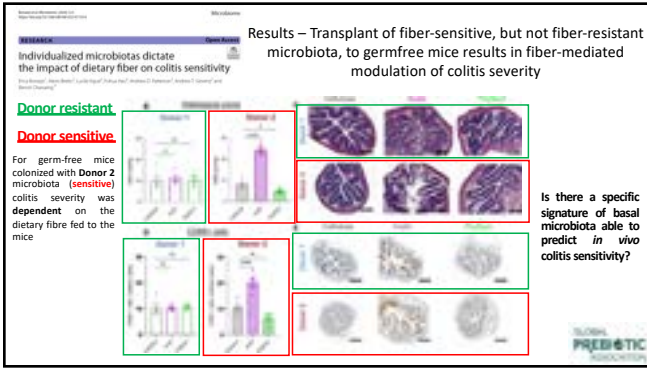
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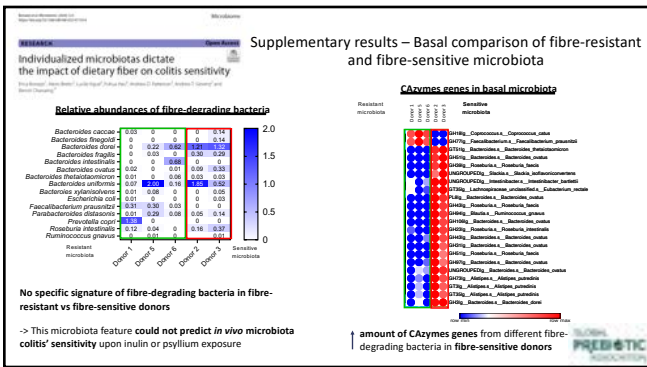
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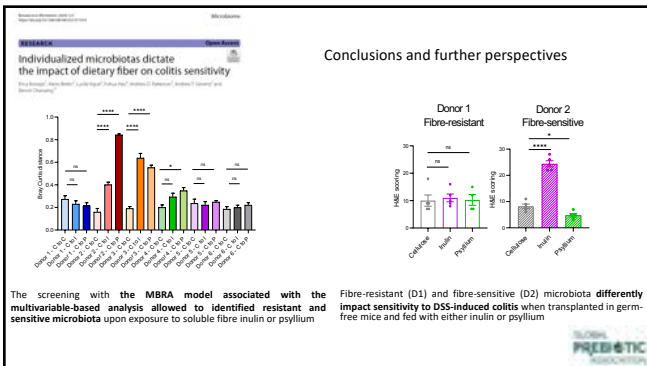
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Individualized microbiotas dictate the impact of dietary fiber on colitis sensitivity

Conclusions and further perspectives

- Understand the mechanisms driving microbiota sensitivity, upon exposure to inulin and psyllium




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Individualized microbiotas dictate the impact of dietary fiber on colitis sensitivity

Conclusions and further perspectives

- Understand the mechanisms driving microbiota sensitivity, upon exposure to inulin and psyllium
- Investigate the suitability of the screening MBRA-based platform to predict fibres sensitivity.



Cohort of IBD patients, clinically identify as "sensitive" or "resistant"




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Support Service: Melyse Detard, Yanick Pauchont  
 Laverie's Ladies: Nathalie Chapoy, Chantal Marie

**Chassalga Laboratory**  
 Benoît Chassalga  
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**Penn State University**  
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