



Italian National Committee for Biosafety, Biotechnology and Sciences of Life

November 26 Digital meeting - "Implementation Action Plan" (IAP) of the Italian initiative on Microbiome.



***Health Microbiome  
Concertation and Support Actions  
- EC's roadmap for the future -***

***Joël Doré & Emmanuelle Maguin- INRAE, France***

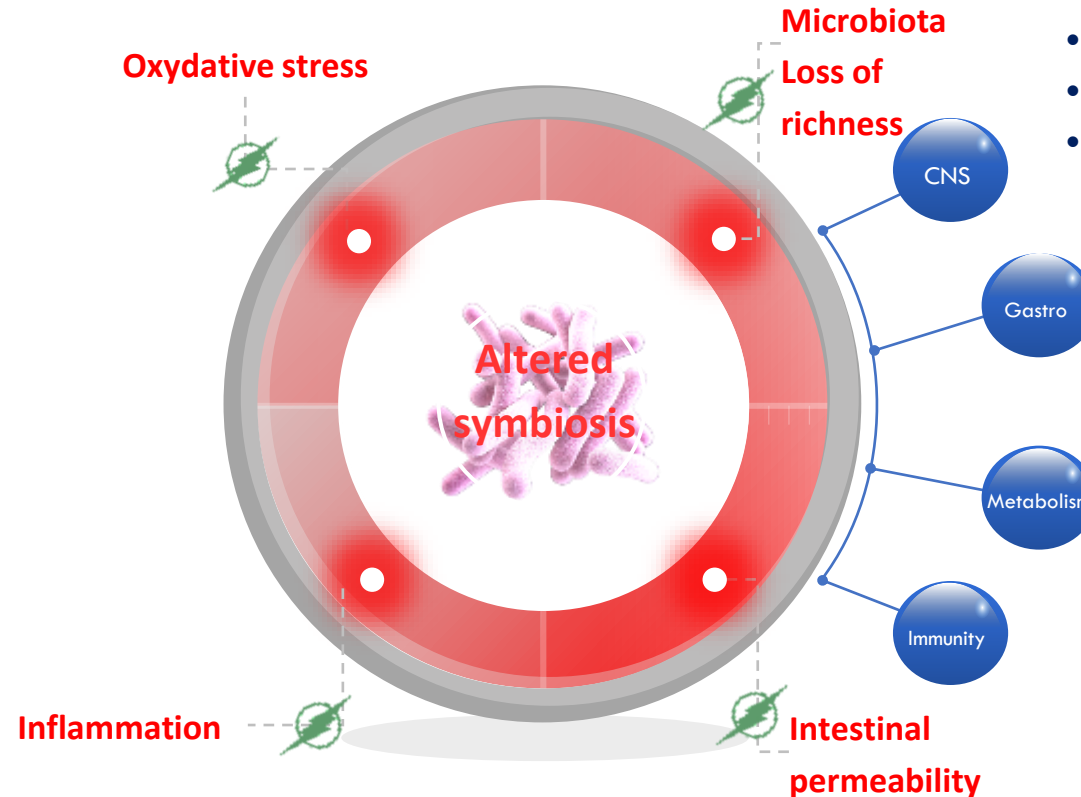


# Altered host-microbes symbiosis in chronic conditions

with circular causalities

... at least  
4 actionable  
levers  
for :

- diagnostic,
- Monitoring,
- prediction,
- prevention
- therapy



- Autism Spectrum Disorders
- Major Depressive Disorders
- Multiple sclerosis
- IBD (CD, UC)
- IBS
- NASH syndrome
- Cirrhosis
- Insulin resistance (T2D)
- Metabolic syndrome
- Obesity
- Allergies
- Auto-immune diseases
- Cancer immunotherapy

Where nutrition targeted microbiota ...

Where medicine targeted symptoms and mainly inflammation...

... an urgent paradigm shift ; huge opportunities towards personalized holistic approaches

Doré Thérapie 2017  
Van de Guchte Microbiome 2018  
Van de Guchte Microbiome 2020



# International Human Microbiomes Concertation and Support Action

## IHMCSA, overall mission

Joël Doré, Emmanuelle Maguin (INRAE) & Mani Arumugam (UCPH)

**keep Europe at the forefront of microbiome research and innovation and maximize its impact by ensuring coherence and harmony in the way microbiome research is and will be performed**

- Bringing together leading EU and international players (partners and members of its Strategic Steering Committee and Stakeholders' Advisory Board).
- Collectively developing international synergies for research and knowledge transfer in the microbiome field at EU and international levels
- Providing instruments to support a robust usage of microbiome knowledge to tackle the epidemics of chronic diseases.

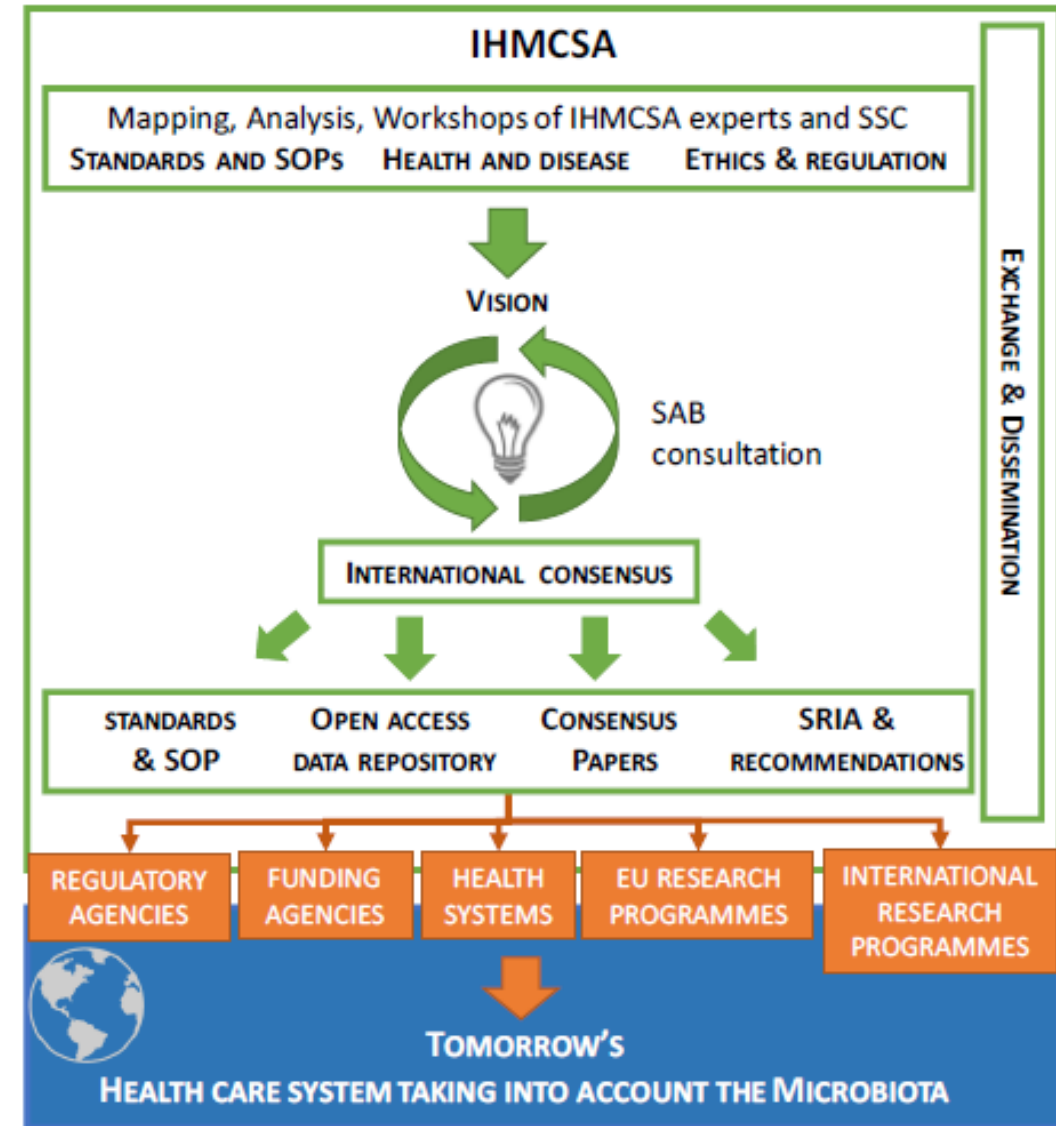
# International Human Microbiomes Concertation and Support Action

## IHMCSA approach & Key outputs

European and international stakeholders **build consensus in the field of human microbiome**, in direct collaboration with International Human Microbiome Consortium (IHMC)

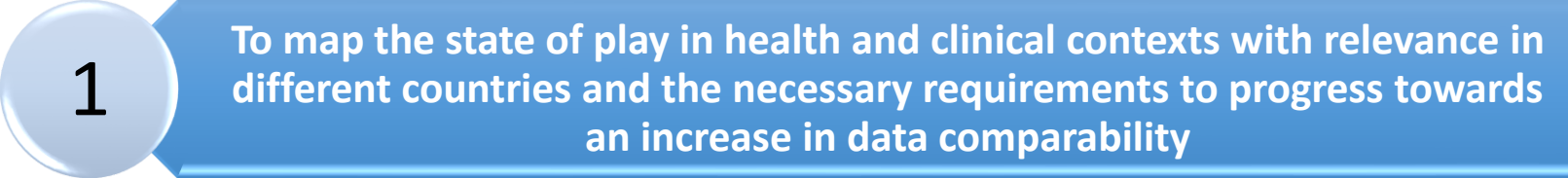
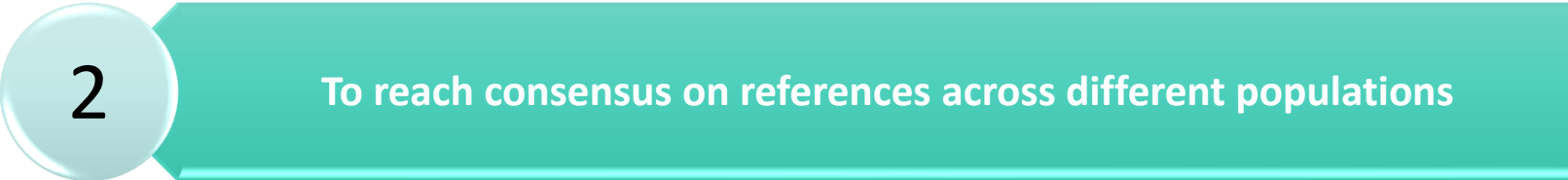

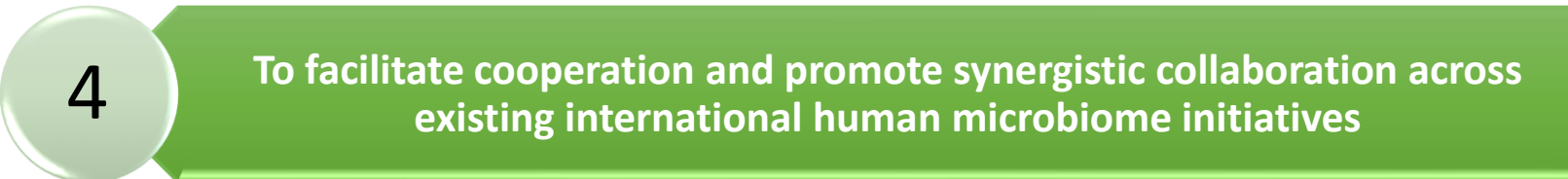
### KEYS OUPUTS.

- ✓ Strategic Research and Innovation Agenda towards microbiome-based research and innovations for diagnosis and personalized prevention and treatment
- ✓ Sustainability : European Microbiome Centers Consortium & IHMCSA repository



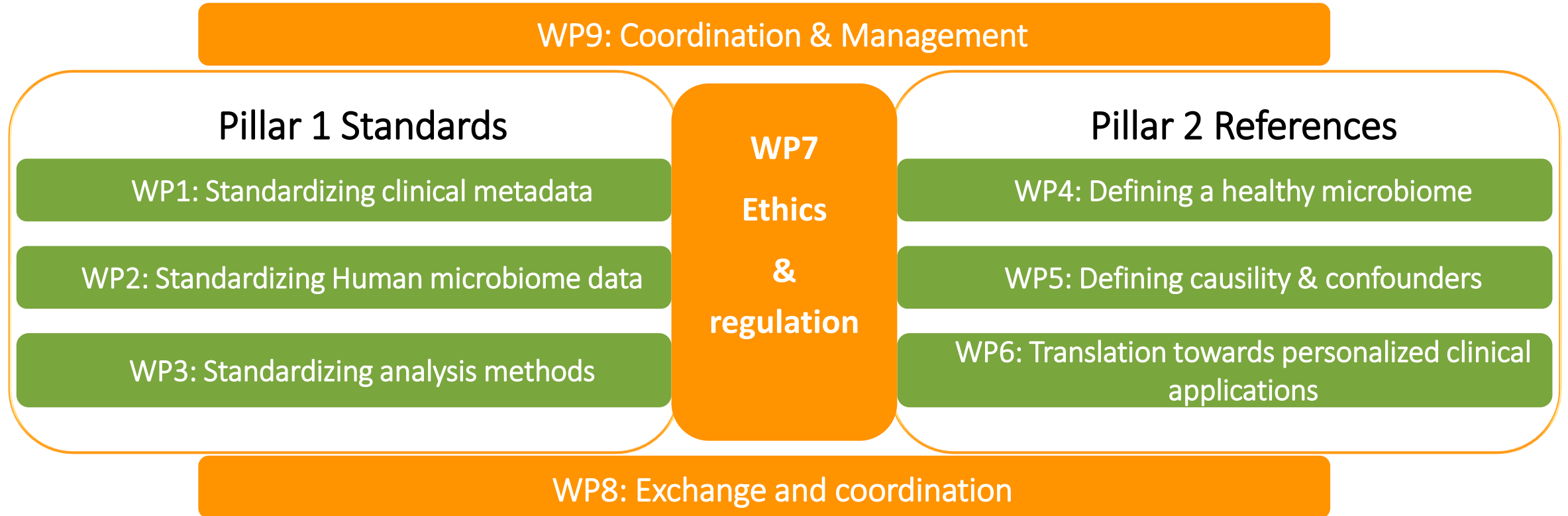
# International Human Microbiomes Concertation and Support Action

## IHMCSA Specific objectives

- 1 To map the state of play in health and clinical contexts with relevance in different countries and the necessary requirements to progress towards an increase in data comparability
- 2 To reach consensus on references across different populations
- 3 To propose actions addressing gaps, emerging fields and political priorities
- 4 To facilitate cooperation and promote synergistic collaboration across existing international human microbiome initiatives

# International Human Microbiomes Concertation and Support Action

## IHMCSA overview



# International Human Microbiomes Concertation and Support Action

## IHMCSA Core partners

France:



Italy:



UNIVERSITÀ  
DI TRENTO

Spain:



EF Clif  
EUROPEAN FEDERATION  
FOR THE STUDY OF  
CLIMATE CHANGE

Germany:



EMBL



Belgium:



eufic

The Netherlands:



Luxembourg:



Denmark:



UNIVERSITY OF  
COPENHAGEN



Ireland:



UCC

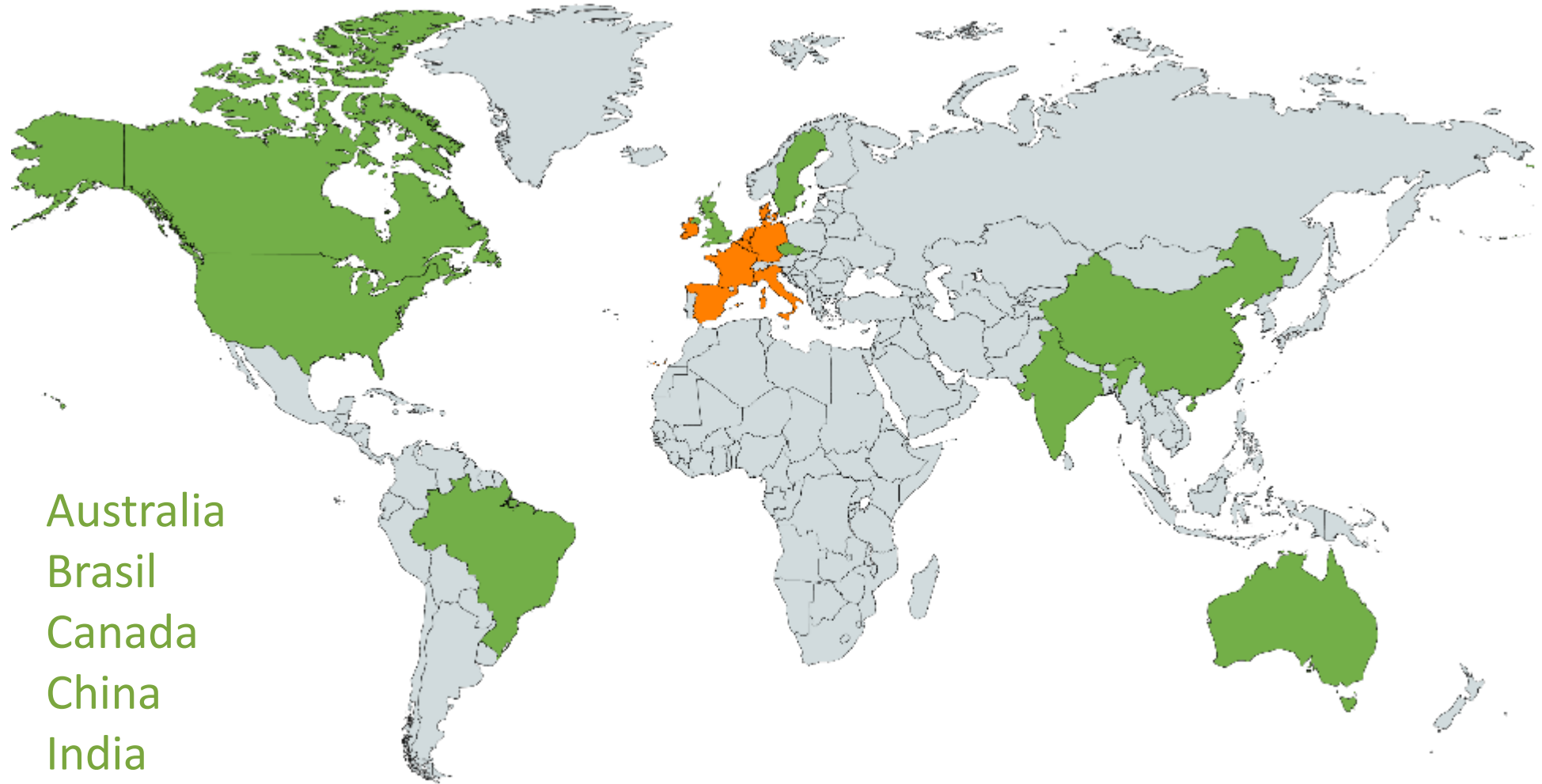
University College Cork, Ireland  
Co. Wick. in NCI and in Cork





# International Human Microbiomes Concertation and Support Action

## IHMCSA international connections



Australia

Brasil

Canada

China

India

USA

+ International Human Microbiome Consortium

Created with mapchart.net





This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 818116



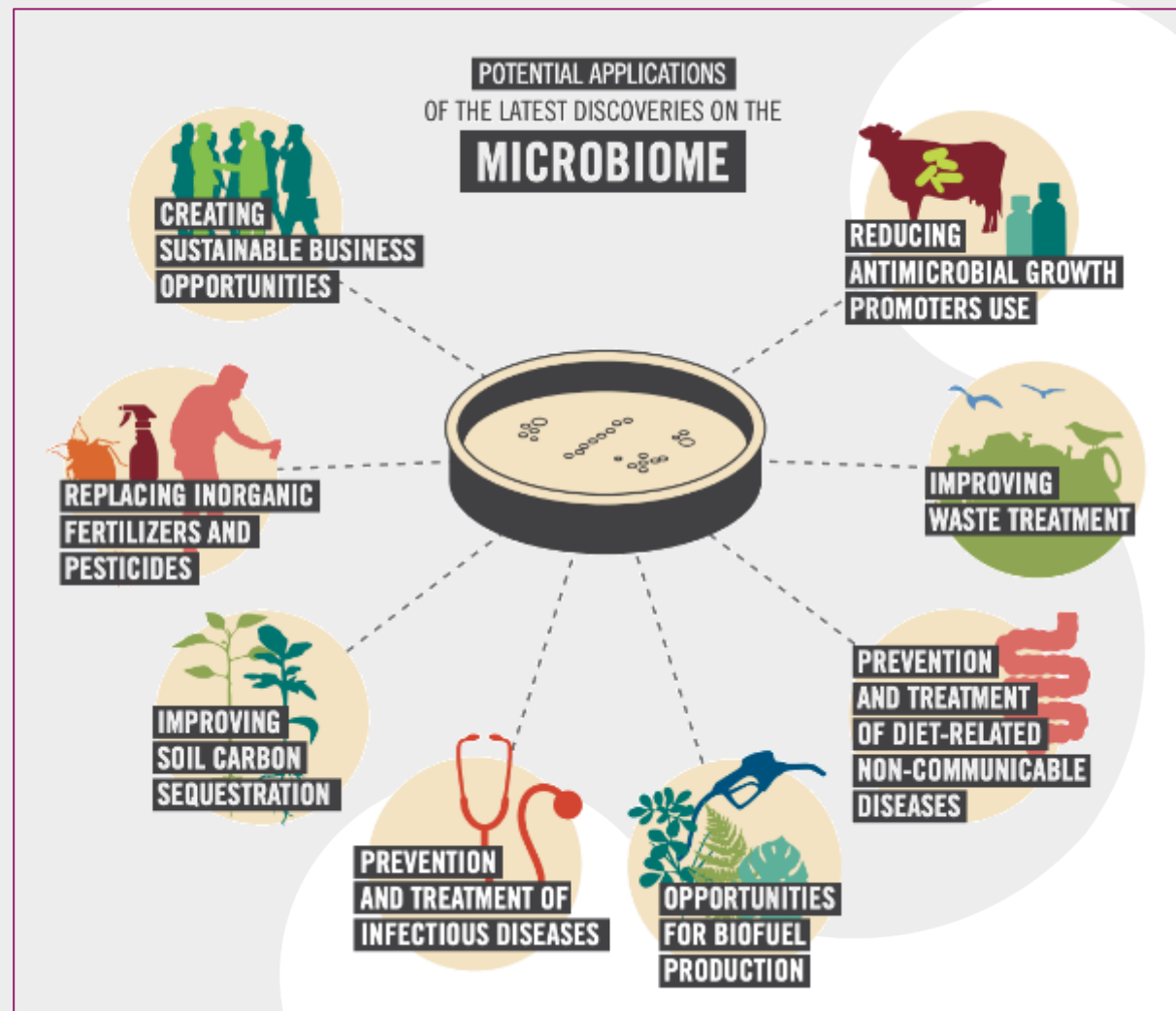
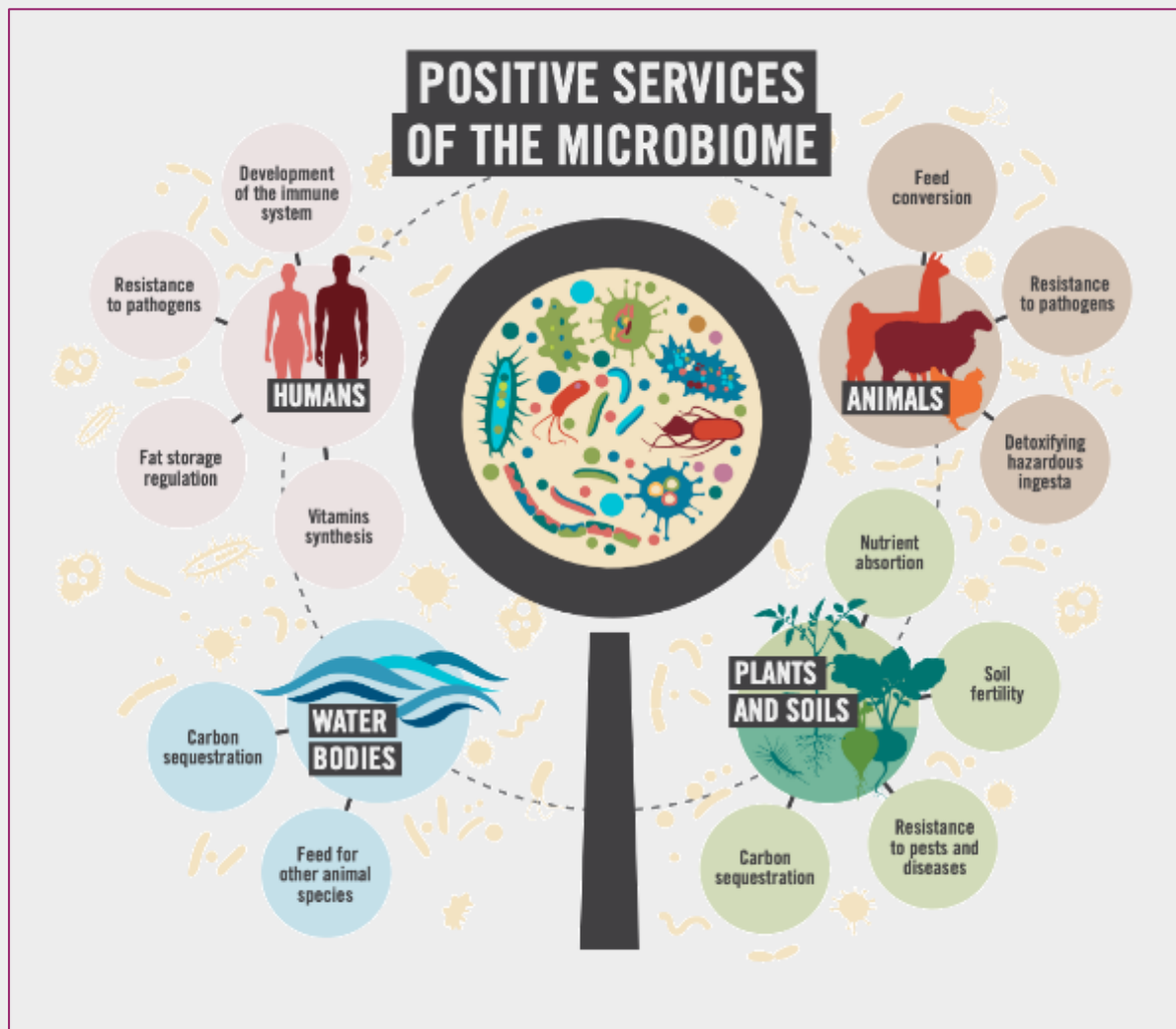
# Towards coordinated microbiome R&I activities in the food system to support international bioeconomy goals

Angela Sessitch (AIT) & Emmanuelle Maguin (INRAE)

*Nov. 2018-Oct. 2022*

# Microbiome services are enablers to transform food systems

towards more sustainability and resilience

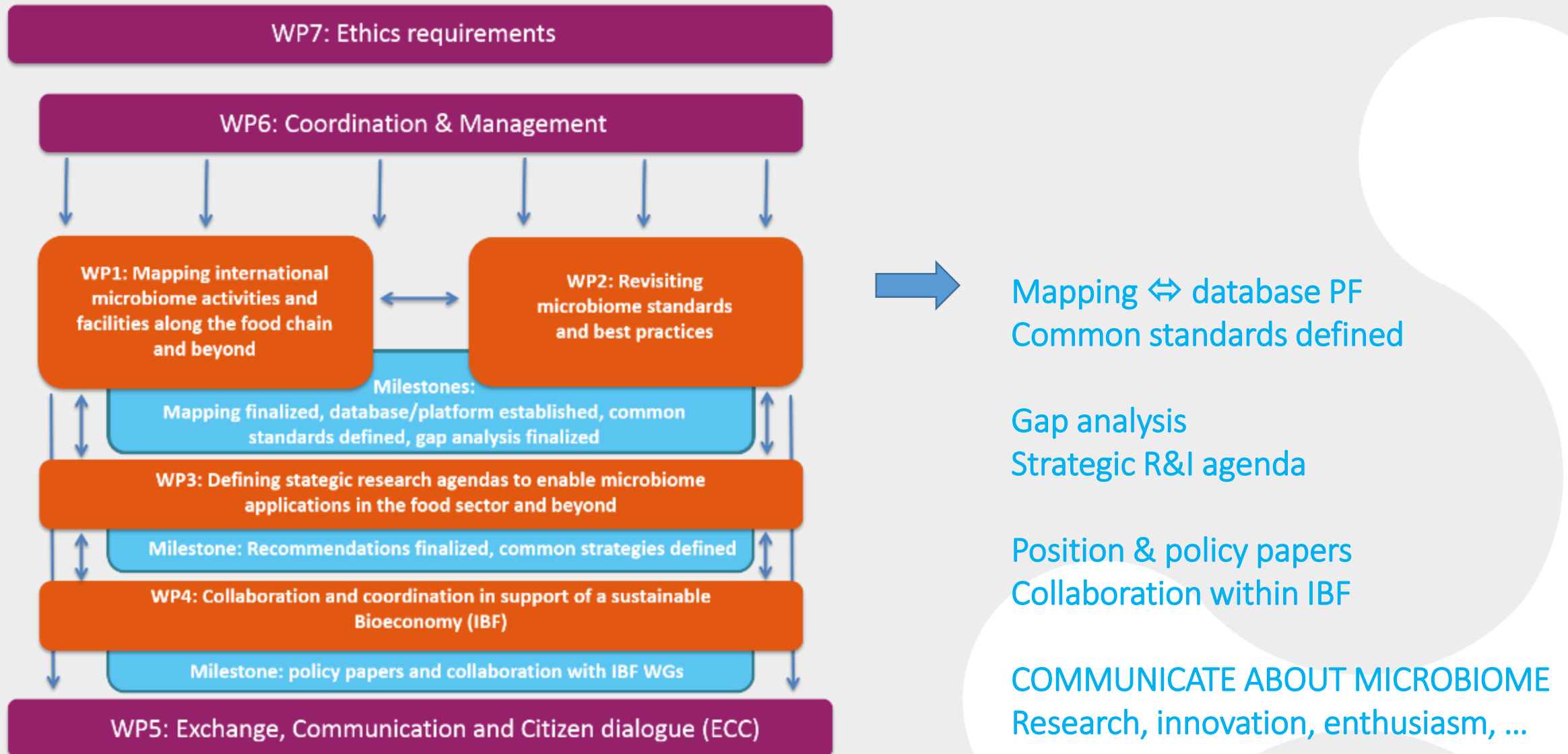




# Microbiome services can contribute to the UN SDG, European green deal (Food 2030) and Bioeconomy strategies



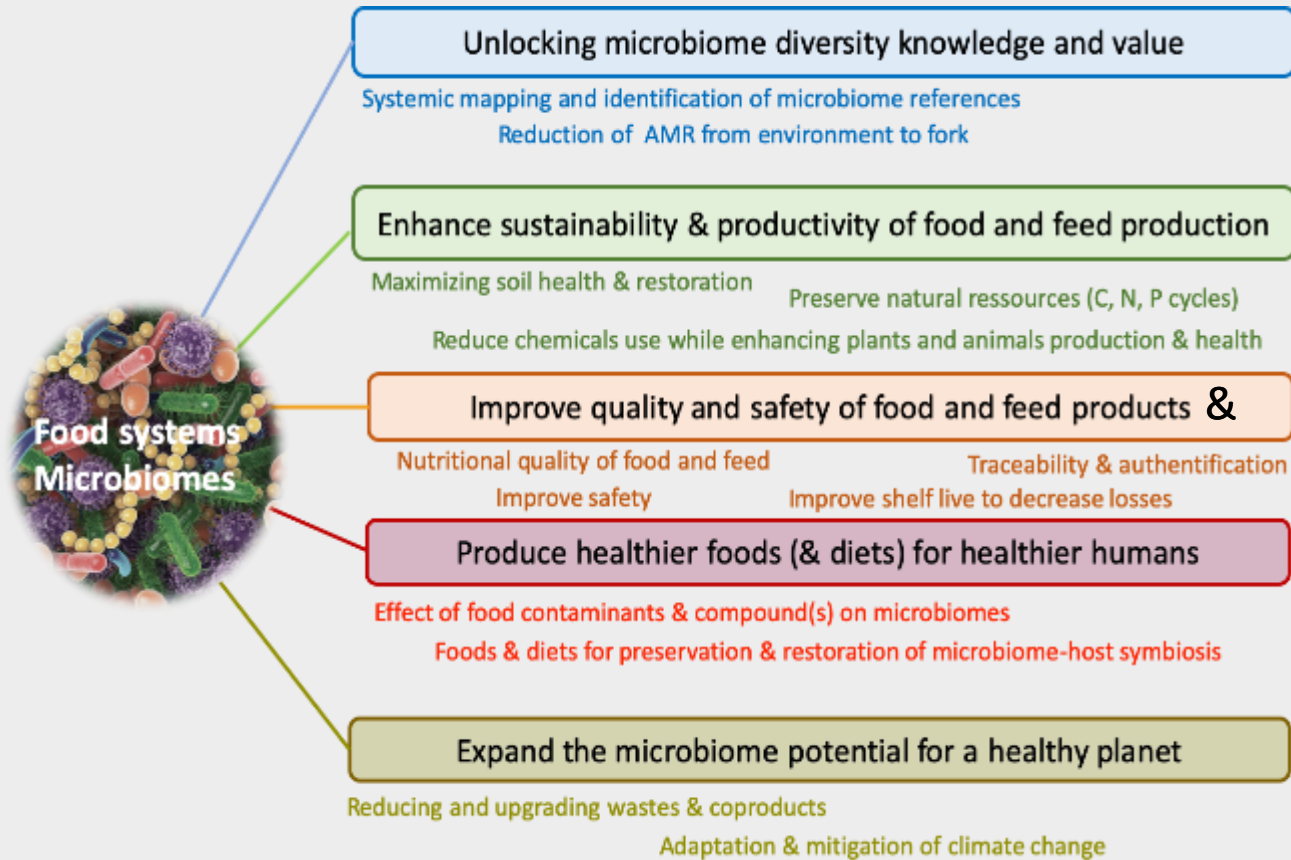
# CSA MicrobiomeSupport on microbiomes for the transition to sustainable food systems





# Microbiome support SRIA draft

## 5 thematic areas



## 5 transversal issues



- Consultation will start in January 2021 ([microbiomesupport.eu](https://microbiomesupport.eu))



# MICROBIOMESUPPORT Vision

**MICROBIOMESUPPORT will represent THE major, internationally recognized platform for microbiome R&I related to food systems and beyond including relevant stakeholders and will substantially contribute to global bioeconomy goals**

# Merci de votre attention



**MetaGenoPolis (MGP)** is an **INRAE Unit**, expert in gut microbiome research applied to health and nutrition

MGP's expertise in the analysis of the gut microbiome and its implications in health & nutrition has been **widely recognized in the international scientific community since 2010**

*PIA laureate: 19 M€ grant (2012-2019)  
5.7 M€ grant (2020-2025)*

Launching 2021 *Le French Gut Program – Le Microbiome Français*  
French component of the Million Microbiome of Humans Project