# **Participatory Science for MICROBIOME Sampling Fieldwork** a Case Study-Based Model to Bridge Education and Environmental Microbiome Research

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STUDENTS

**METHODS** - the Student-Science model

BICOCCA SAMPLING DAYS



heoretical and practical introduction



parallel environmental sampling



### metadata annotation

### sampling overview



oject realized within the MUSA – Multilayered Urban Sustainability Action – project, funded by <u>he European Union – NextGenerationEU, under the National Recovery and Resilience Plan</u> NRRP) Mission 4 Component 2 Investment Line 1.5: Strenghtening of research structures and creation of R&D "innovation ecosystems", set up of "territorial leaders in R&D"







## **RESULTS:** educational impacts evaluation

#### science inquiry-related skills



Fig. 2. Paired (before and after attending BSDs) participants' scores for Self Efficacy for Skills for Science Inquiry. Participants are divided into low and high initial levels of perceived Skills for Science Inquiry.



Fig. 3. Scores of self-efficacy for doing environmental microbiome sampling, participants VS non-participants







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#### self-efficacy for doing science

#### understanding and knowledge of the sampling process



Fig. 4. Understanding of the environmental microbiome sampling process, participants VS non-participants



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MUSA











