Special STSM Offer hosted by the BRC Szeged:

"Connecting Phenotype to Microbiome"

Hosted by the Algal and Microbial Genomics Group | HUN-REN BRC Szeged, Hungary

The Offer: We welcome applications from researchers who have physiologically characterized their plant-bacterial or plant-fungal systems and now require NGS analysis to understand the compositional changes within the microbiome that could contribute to the observed plant phenotype.

The Training Scope: The selected participant will receive hands-on training in:

1. **Extraction:** Best practices for high-quality DNA extraction from complex plant rhizosphere samples.
2. **Library Prep:** Construction of sequencing libraries tailored to the chosen platform.
3. **Informatics:** Introduction to bioinformatic pipelines, from quality control to preliminary functional analysis.

Successful applicants can choose the pipeline that fits their biological question:

- **Genomics:** Whole-genome sequencing of novel bacterial or fungal isolates for phylogenomic placement and the identification of biosynthetic gene clusters.
- **Metagenomics:** Comparative analysis of rhizosphere or phyllosphere microbiomes under treated vs. control conditions to identify shifts in microbial composition, functional potential, or community level responses.

Host Institute: HUN-REN BRC, Szeged, Hungary

Lab: Algal and Microbial Genomics Group (PI: Gergely Maróti)

Contact Person: Prateek Shetty (prateekshettys@gmail.com)

Website: https://www.brc.hu/en/research/institute-of-plant-biology/microbial-and-plant-genomics-research-unit/algal-and-microbial-genomics-group

Focus Area: Plant-bacterial and plant-fungal Interactions.

Funding: The participant must apply for a standard COST STSM grant for travel/accommodation. The host lab will cover sequencing and library prep costs.

Selection Process: Due to the hands-on nature of the training and the sequencing resources provided, **only 1 participant will be selected** for this call.

How to Apply: Interested participants should send a **1-page proposal** covering:

1. **System Overview:** Basic information on your biological system.
2. **Phenotypic Data:** Brief summary of the morphological or physiological traits you have already characterized.
3. **Omics Interest:** Which analysis (Genomics or Metagenomics) you require and why.