

**COST Action KEYSOM
2nd Training School**

Linking soil biodiversity with soil organic matter dynamics

20-23 March 2018

Birmensdorf, Zurich, Switzerland

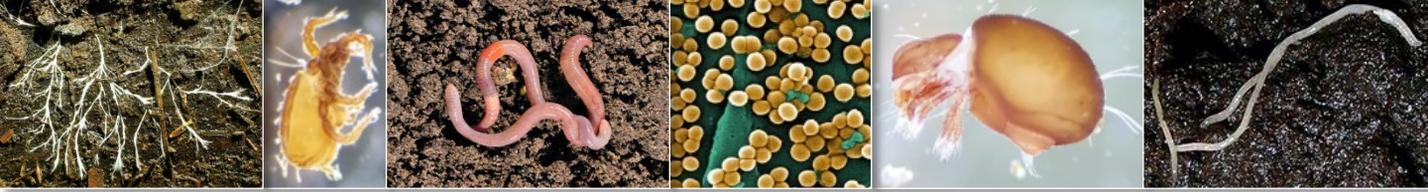
Aim of the Training School

Framed within the objectives of the COST ACTION KEYSOM (Soil Fauna – Key to Soil Organic Matter Dynamics and Modelling), this training school aims at linking the role of the soil biodiversity with the soil organic matter dynamics. This school will provide a comprehensive overview of the tools available to assess the soil biodiversity (including macrofauna, mesofauna, microfauna and microorganisms), such as classical taxonomic approaches to novel soil DNA metabarcoding. The originality of this training school lies in the interdisciplinarity of its subjects, from molecular biology to soil science. Along with core lectures, this training school will have extended time periods reserved for practical classes, providing an in-depth introduction to the methods taught. Targeted mainly at PhD students and young post-doctoral fellows, this training school also aims at stimulating collaborative research among participants and with the guests lecturers.



COST ACTION ES1406
**Soil fauna - Key to Soil Organic
Matter Dynamics and Modelling**





Covered Topics

- **Experimental and sampling design:** theoretical overview from experimental design to data analyses, practical field assessments including soil profile description, sampling of soil ecosystems.
- **Soil organic matter dynamics:** soil organic matter characterization, importance of edaphic factors for the carbon cycle.
- **Soil biodiversity:** extraction of soil invertebrates, morphological assessment, trait-based approaches.
- **DNA metabarcoding:** state-of-the-Art and hands-on in the lab, challenges and pitfalls, integration of DNA metabarcoding in soil monitoring programmes.
- **Analysis of datasets:** data analyses, statistics, integration of biodiversity data into soil and organic matter dynamic modelling.

Trainers

Prof. Maria Briones, Ecology and Animal Biology, University of Vigo (ES)

Prof. Jérôme Cortet, Center for Functional Ecology and Evolution, Montpellier (FR)

Prof. Gaby Deckmyn, Plant and Vegetation Ecology, University of Antwerp (BE)

Prof. Juliane Filser, Soil Ecology, Bremen University (DE)

Prof. Georg Guggenberger, Soil sciences, Leibniz University, Hannover (DE)

Dr. Juan Jiménez, Pyrenean Institute of Ecology, Jaca (ES)

Prof. Davey Jones, Soil and Environment, Bangor University, Bangor (UK)

Prof. Paul-Henning Krogh, Soil Fauna Ecology and Ecotoxicology, Aarhus University (DK)

Prof. Karen Vancampenhout, Soil and Water Management, KU Leuven (BE)

Participation and Registration

This training school has no registration fees. Selected participants (limited to 25) will receive a “trainee grant” as a contribution to their expenses regarding traveling, accommodation and meals, according to COST regulations. Trainees eligible for reimbursement are those from all COST countries, approved NNC institutions and approved European RTD Organisations (see COST regulations). Application files (one single pdf), including a CV and a motivation letter, should be send to Aline Frossard (aline.frossard@wsl.ch) until **January 15, 2018**.

<http://www.keysom.eu/>



Organisation

Aline Frossard and Beat Frey

Cost Action ES1406 Chairs

Juan J. Jiménez and Juliane Filser



COST is supported by the EU Framework Programme Horizon 2020