



University of Genova

Department of Earth, Environmental  
and Life Sciences

Doctorate Course in Earth and  
Environmental Science and  
Technology

Università degli Studi di Genova



Dottorato in Scienze e Tecnologie  
per l'Ambiente e il Territorio

### Curriculum in biology applied to agriculture and the environment

Research theme 3

**Titolo:** Messa a punto di dispositivi per il controllo di ditteri e per l'abbattimento della loro carica microbica in contesti urbani ed industriali

**Title:** Set up of new tools for fly control and reduction of their microbial load in urban and industrial contexts

**Tutor:** Prof. Stefano Vanin, stefano.vanin@unige.it

Program description including the formation program abroad:

The project is in collaboration with Italsia s.r.l. Aims are to set up a new tool for the eradication of flies of economic and sanitary interest from urban and industrial contexts and to reduce the microbic load associated with them. The projects will be developed at three different level:

- 1) Sampling of the most common flies associated with urban and industrial context. Ports will be considered as priority targets
- 2) Characterization of the microbial community associated with files
- 3) Set up of a tools able to attract and kill flies from the above mentioned environment and as well able to reduce the microbial load associated with insects

Student will spend, depending on the pandemic conditions, time to improve the identification techniques and the molecular expertise in different European (eg. Poland, France) and non-European countries (eg. UK) and he/she will attend the PhD learning modules.

Financial support: FRA2020

Tutor's publications:

Tuccia F., Zurgani E., Bortolini S., **Vanin S.** 2019 Experimental evaluation on the applicability of necrobiome analysis in Forensic Veterinary Science. *MicrobiologyOpen* 12:e828 doi: 10.1002/mbo3.828

Lo Pinto S., Giordani G., Tuccia F., Ventura F., **Vanin S.** 2017 First records of *Synthesiomyia nudiseta* (Diptera: Muscidae) from forensic cases in Italy. *Forensic Science International* 276:e1-e7 doi: 10.1016/j.forsciint.2017.05.003.

Tuccia F., Giordani G., **Vanin S.**, 2016 A general review of the most common COI primers for Calliphoridae identification in Forensic Entomology. *Forensic Science International-Genetics* 24:e9-e11 doi: 10.1016/j.fsigen.2016.07.003