



### 1. Line of research

Environmental sustainability and animal welfare in livestock farms

### 2. ERC descriptor

LS9\_3 - Applied animal sciences (including animal breeding, veterinary sciences, animal husbandry, animal welfare, aquaculture, fisheries, insect gene drive)

LS9\_4 - Applied plant sciences (including crop production, plant breeding, agroecology, forestry, soil biology)

### 3. Job description

The project aims to identify housing and management solutions that can mitigate the emissions of potentially polluting substances from livestock farms and, at the same time, guarantee a greater level of welfare in livestock farms also thanks to the monitoring of the animals' living environment.

### 4. We offer

The position offered for this research topic foresees an in-depth study of aspects related to the sustainability of the livestock system. The planned activity concerns monitoring in livestock farms with IoT solutions that use advanced sensors to detect animal behaviour and related environmental conditions. In this context, the assessment of the emissions to air deriving from the breeding and management structures of the effluents is relevant.

### 5. Desired skills

The expected requirements concern a good knowledge of the management and environmental aspects of livestock farming. In addition, a good understanding of the monitoring systems of microclimatic conditions within the farms and the behaviour of the animals and the techniques of Precision Livestock Farming are preferred.

## **6. Contacts**

For additional information on this research topic you can contact [giorgio.provolo@unimi.it](mailto:giorgio.provolo@unimi.it), (<https://expertise.unimi.it/get/person/giorgio-provolo>).